

CASON HWL 14  
78H16R

Review  
of  
Public Safety Services  
in the  
Hamilton–Wentworth Region

Prepared for the  
Hamilton-Wentworth Region  
Review commission

smith, auld & associates ltd.  
january, 1978

**HAMILTON PUBLIC LIBRARY**

REFERENCE COLLECTION

URBAN/MUNICIPAL



FOR USE IN LIBRARY ONLY

A REVIEW  
OF  
PUBLIC SAFETY SERVICES  
IN THE  
HAMILTON-WENTWORTH REGION


HAMILTON PUBLIC LIBRARY

MAR 26 1979

COPY /

This report was prepared in January 1978 for The Hamilton-Wentworth Region Review Commission by Hugh Auld, Richard Loreto, Wayne Petrozzi and Ronald Smith of Smith, Auld & Associates Ltd. The opinions expressed herein are those of the authors and are not necessarily shared by the Commission.





Digitized by the Internet Archive  
in 2023 with funding from  
Hamilton Public Library



## TABLE OF CONTENTS

	Page
PREFACE	1
SUMMARY	3
AMBULANCE SERVICE	6
Introduction	6
Statutory Basis	6
History	6
Activities	8
Technical Data	8
Personnel Training and Development	21
Resources	21
Issues	24
Options	27
Conclusions	28
EMERGENCY MEASURES	29
Introduction	29
Activities	29
Resources	31
Issues	31
Options	33
Conclusion	33
FIRE PROTECTION	34
Introduction	34
Statutory Basis	36
Organization of Fire Departments	37
Fire Protection Activities and Levels of Service	38
Inter-Municipal Fire Protection Agreements	50
Fire Protection	52
Manpower and Deployment	52
Facilities and Equipment	55
Response Time	58
Dispatching and Communications System	63
Expenditures on Fire Protection and Fire Losses	63



	Page
Issues	74
Training	74
Mutual Aid and the Emergency Fire Service Plan	75
The Regional Fire Coordinator	76
Full-Time Versus Volunteer Fire Fighters	78
Central Dispatching and Communications	79
Future Development Trends	80
Fire Prevention	81
Bylaws	82
Inter-Municipal Agreements	82
Options	83
A Return to the City County System that Existed Prior to 1974	83
A Single Tier Region	84
An Enlarged City with the Remaining Areas Annexed by Adjacent Counties and Regions	86
An Enlarged City and a Rural Single Tier Municipality	86
Modification of the Current System	87
Six Single-Tier Municipalities	88
POLICING	89
Introduction	89
Statutory Basis	90
History	91
Organization	92
Activities	94
Support Services	96
Line Operations	97
Complaints Procedures	107
Resources	108
Personnel	112
Finances	119
Issues	126
Rotation of Patrol personnel	129
Levels of Service and Costs	130
Control and Accountability	131





	Page
Options	132
A Return to the City/County System	132
A Single-Tier Region	134
Six Single-Tier Municipalities	134
An Enlarged City with the Remainder of the Region Formed into a County System or Annexed to Adjacent Regions or Counties	134
An Enlarged City and a Rural Single- Tier Municipality	135
Modifications to the Existing Two-Tier System	135
APPENDICES	136
Appendix A - Listing of Priority Categories	137
Appendix B - The Extension of Regional Policing to the Townships of Flamborough and Glanbrook	138





# LIST OF TABLES

	Page
Table 1. Ambulance Services in Hamilton-Wentworth Region, 1977	9
Table 2. Comparative Data, Ambulance Services in Major Ontario Municipalities, 1976	11
Table 3. Increase of Calls by Total and by High and Low Priority for Selected Years	12
Table 4. Comparative Growth 1969-1976, Population and Ambulance Calls	13
Table 5. Comparison of Call Distribution by Operator for Selected Years	15-16
Table 6. Average Response Time, Hamilton-Wentworth, for Selected Years	17
Table 7. Distribution of Emergency Calls by Area Municipality for Period January 1 - September 30, 1974	18
Table 8. Summary of Mean Average Time Lapse for Low Priority Calls	19
Table 9. Summary of Mean Average Time Lapse for High Priority Calls	20
Table 10. Consolidated Ambulance Service Operating Budgets and Per Capita Costs, 1975 - 1977	22
Table 11. Comparative Financial Data, Major Ontario Municipalities, 1976	23
Table 12. Dispatch Centre Complement for Selective Years	25
Table 13. Expenditures on Emergency Measures 1974-1977	32
Table 14. Municipal Fire Departments in the Hamilton-Wentworth Region, 1977	35
Table 15. Total Alarms in the Hamilton-Wentworth Region by Municipality for Selected Years	41
Table 16. Fire Alarms per 1000 Population in the Hamilton-Wentworth Region by Municipality for Selected Years	42



	Page
Table 17. Percentage Breakdown of Total Fire Calls in Hamilton-Wentworth by Area Municipality for Selected Years	43
Table 18. Total Calls, Fire and Non-Fire, in Hamilton-Wentworth Region by Area Municipality for Selected Years	44
Table 19. Fire Prevention Services of Municipal Fire Departments in the Hamilton-Wentworth Region, 1977	46
Table 20. Mutual Aid Calls in the Hamilton-Wentworth Region by Municipality for Selected Years	51
Table 21. Number of Fire Fighters in the Hamilton-Wentworth Region by Municipality for Selected Years	53
Table 22. Deployment of Fire Fighters by Municipality and by Station, 1977	56
Table 23. Location of Fire Halls and Deployment of Equipment in the Hamilton-Wentworth Region by Municipality, 1977	59
Table 24. Maximum Response Distances, Hamilton Fire Department, 1977	61
Table 25. Maximum Distance to Fire Site, Maximum Response Time, and Average Response Time for Suburban and Rural Fire Departments, 1977	62
Table 26. Fire Protection Expenditures in the Hamilton-Wentworth Region by Municipality for Selected Years	65
Table 27. Fire Protection Expenditures Per Capita in the Hamilton-Wentworth Region by Municipality for Selected Years	66
Table 28. Fire Protection Expenditures per \$1,000 of Equalized Assessment in the Hamilton-Wentworth Region by Municipality for Selected Years	67
Table 29. Number of Fire Losses in the Hamilton-Wentworth Region by Municipality for Selected Years	68
Table 30. Fire Losses Per Capita in the Hamilton-Wentworth Region by Municipality for Selected Years	69





	Page
Table 31. Fire Losses Per \$1,000 of Equalized Assessment in the Hamilton-Wentworth Region by Municipality, 1975, 1976	70
Table 32. Ranking of Fire Departments According to Fire Losses and Fire Protection Expenditures Per Capita and Per \$1,000 Equalized Assessment for 1976	72
Table 33. Comparative Fire Protection Costs and Fire Losses, 1976	73
Table 34. Calls for Service and Incidences as Reported by Area for Selected Years	99
Table 35. Distribution of Patrol Personnel by Area, Hamilton-Wentworth, 1975-1977	100
Table 36. Actual Offences by District 1976-1977	101
Table 37. Patrol Areas as Related to Police Activity Generated by Incidences	102
Table 38. Comparative Crime Clearance Rates, Selected Regional and Metropolitan Municipalities, 1976	104
Table 39. Comparative Municipal Crime Statistics, Hamilton-Wentworth and Ontario, 1976	105
Table 40. Traffic Statistics - Hamilton-Wentworth Region, Selected Years	106
Table 41. Authorized Strength for Police Vehicles, Selected Years	109
Table 42. Number of Vehicles and Types, for Selected Years	110
Table 43. Rank Structure of Area Municipal Forces, 1968, 1972, Authorized Personnel	113
Table 44. Police Personnel, Assigned Strength, in the Hamilton-Wentworth Region	114
Table 45. Distribution of Uniformed Personnel, 1974-1977	115
Table 46. Distribution of Civilian Personnel, 1974-1977	116
Table 47. Complement Data, Authorized Strength, Regional Police	117





	Page
Table 48. Allocation of Man Years among Different Types of Police Work for Selected Years	118
Table 49. Salary Structure of Area Municipal Forces, 1968, 1972	120
Table 50. Salary & Rank Structure, Hamilton- Wentworth Regional Police, for Selected Years	121
Table 51. Gross Expenditures for Policing	122
Table 52. Police Costs per Capita, in Hamilton-Wentworth, 1966, 1972, 1975-77	123
Table 53. Major Areas of Cost Increases, Hamilton-Wentworth Regional Police for Selected Years	124
Table 54. Comparative Costs of Policing, 1975 and 1976	125
Table 55. Per Capita Grants - Police	127
Table 56. Per Capita Provincial Grants as a Percentage of Police Expenditures	128
Table 57. Salary and Rank Structure of Ontario Provincial Police in Flamborough- Glanbrook, 1968, 1972	139
Table 58. O.P.P. Crime Statistics and Clearance Rates, Township of Flamborough and Glanbrook, Selected Years	140



## LIST OF MAPS AND CHARTS

		Page
Map 1	Ambulance Station Locations in Hamilton-Wentworth	10
Map 2	Existing and Proposed Fire Station Locations in Hamilton-Wentworth	57
Map 3	Hamilton-Wentworth Regional Police - Area and District Boundaries	93
Map 4	Hamilton-Wentworth Regional Police - Headquarters and Station Locations	111
Chart 1	Hamilton Fire Department - Organization	39
Chart 2	Hamilton-Wentworth Regional Police Force - Organization	95



## PREFACE

This study is one in a series of background reports prepared for The Hamilton-Wentworth Region Review Commission. The others deal with planning and development, social services, transportation, physical services and finance and management in the Region.

The content of this report is limited to the four major elements of public safety services in our society: ambulance service, emergency measures, fire service and policing. Excluded is any consideration of a wide range of public safety activities and services which includes but is not limited to that provided by the schools through classroom instruction, by private security companies, by special professional groups such as air traffic controllers and by service organizations and clubs such as Block Parents. Public safety activities are pervasive and concern for public safety is general. These other activities are, of course, important in our society but they do not have the essential characteristics as subjects of this study - namely, that they are planned, implemented and controlled by government at the area municipal, regional municipal and provincial levels.

It is on the governmental aspects of ambulance service, emergency measures, fire service and policing that this report is focused. Neither the technical nor financial aspects of the four services are examined in detail. Of more importance and relevance to the Review Commission are the relationships between the four services and the structure of government in Hamilton-Wentworth.

Each of the four services studied is, of course, unique. Each shows differences from the others by whatever criterion is used: funding, size, public awareness and, notably, jurisdiction and political control. Ambulance service is essentially part of a health program designed and delivered by the Province. Control and jurisdiction over emergency measures are more diffuse. Fire services fall essentially within the domain of area municipalities. Policing is ostensibly under regional control but is in fact more under the control of the Province. The temptation to make comparisons between the four service areas examined should be resisted as each requires distinct consideration. They all fall within the same policy field and they do interact at an operational level but each can be regarded as a separate entity insofar as local government is concerned.

Accordingly, in addition to the preface and summary to this report, there are four distinct sections on ambulance service, emergency measures, fire services and policing. The report itself represents the culmination of a work program which included several elements. The consultants reviewed and





analysed a large quantity of documentation pertaining to public safety. Discussions and meetings were held with a wide range of elected and appointed officials responsible for the delivery of public safety services in Hamilton-Wentworth and also with officials representing the Province and the insurance industry. The information so collected was analysed and used as a basis on which to draw conclusions about public safety vis-a-vis the major restructuring options available to The Hamilton-Wentworth Region Review Commission. All supporting documentation used in the preparation of this report has been provided to the Review Commission.

The authors of this report would like to express their appreciation for the invaluable assistance they have received from all the people with whom they had contact during the course of the work program of this study. The authors are particularly indebted to officials representing the eleven fire departments in the Region and those representing the Hamilton Wentworth Regional Police. They were more than tolerant of the demands made on their time; they were extremely cooperative and helpful.



## SUMMARY

This report examines the four major public safety services in the Hamilton-Wentworth Region -- ambulance service, emergency measures, fire protection and policing.

Ambulance service consists essentially of the quick and efficient transportation of ill and injured people to medical facilities. The statutory basis for the service is The Ambulance Act and, since 1968, responsibility for the service has rested entirely with the Ontario Ministry of Health. Local government involvement is negligible and the nature and cost of ambulance services have not been affected by regionalization. Four private operators deliver the service, which is faster in the city than in rural areas but which otherwise appears of satisfactory quality. No recommendations for change are being made as a result of this review and ambulance service should remain unaffected by any restructuring of local government in Hamilton-Wentworth.

Emergency measures activities consist of developing and implementing plans to assure a state of preparedness in the event of a large scale emergency. The statutory basis for this service is fragmented consisting of federal, provincial and local government statutes and bylaws. Prime responsibility presently rests with the office of the regional coordinator of the Regional Municipality which appears to be performing the function effectively and at low cost. No recommendations for change are being made. Comparable coordination would be difficult to achieve if this were an area municipal responsibility.

Fire protection services consist primarily of fighting fires and preventing fires. The statutory basis for this permissive service is provided by The Municipal Act, The Regional Municipality of Hamilton-Wentworth Act, The Fire Departments' Act and The Fire Marshal's Act. In Hamilton-Wentworth responsibility for fire protection rests with the six area municipalities. Together they have 11 fire departments and 751 fire-fighters, 60% of whom are full-time. In 1977 total fire protection expenditures in the Region exceeded 11 million dollars. Regionalization did not have any significant effects on this service except in establishing the position of regional fire coordinator. The people of Hamilton-Wentworth appear well-served by their fire departments but there are causes for concern. Consolidation of the departments in Flamborough and, separately, the departments in Glanbrook is required and full-time chiefs should be appointed in each. In addition, Flamborough's council in conjunction with its current fire chiefs should re-assess the adequacy of its recently passed bylaw.



Weaknesses in the training provided in the smaller departments should be rectified through regional sharing and cooperation and initiative on the part of the Ontario Fire Marshal. The services provided by the Fire Marshal may also be useful in determining the need for an emergency fire service plan and the identification of fire protection situations requiring formal inter-municipal agreement. Municipalities which have been earmarked for high levels of growth, particularly Glanbrook and Flamborough, should begin to plan for the implications of this growth on fire protection services. In this regard the current manpower situation in Ancaster should be reviewed by appointed and elected officials in that municipality. Finally, the question of a regional fire department must be approached with a great deal of caution. Fire departments in the Region appear to be reasonably effective. Therefore, the potential cost implications of a regional department must be justified in relation to the need for higher levels of service.

Policing covers a wide range of proactive and reactive functions aimed at the maintenance of law and order. These include crime solving, law enforcement, public education, crime prevention and response and referral. The statutory basis for policing is provided by The Municipal Act, The Regional Municipality of Hamilton-Wentworth Act and The Police Act. Policing in Hamilton-Wentworth is the responsibility of the Hamilton-Wentworth Regional Police. This force is funded from the regional levy and was formed in 1974 by the amalgamation of the police departments of Hamilton, Ancaster, Dundas, Saltfleet and Stoney Creek. In 1977 it took over from the Ontario Provincial Police general policing responsibility in Glanbrook and Flamborough. It is governed by the Hamilton-Wentworth Regional Board of Commissioners of Police, which is essentially an agency of the Province although two of its five members are regional councillors. Policing is personnel intensive and costs have risen dramatically in recent years. The 1977 budget of the Hamilton-Wentworth Regional Police exceeded \$23 million dollars. Insofar as it can be measured, the general level of policing service provided to the people of Hamilton-Wentworth appears satisfactory. However, there are at present several interrelated policing issues in the Region. The level of service could be too high or at least too uniform in that insufficient recognition is given to the need for "rural policing" through either the patrol system or other service delivery. Partly for this reason, costs could be too high. This in turn raises concerns about the weakness of local government in the control over, and accountability for, this vital service to the community in a period of increasing financial restraint. Regional policing should be preserved and obviously will not be threatened by continuation of the present two-tier local government system in the Region or a shift to a single regional tier. Any dismantling of regional government in Hamilton-Wentworth, however, would make maintenance of





regional policing very difficult. If the Hamilton-Wentworth Regional Police were dissolved, the Hamilton force would be dominant and again a likely source of special services for whatever other area municipal forces there were.



## AMBULANCE SERVICE

### Introduction

The responsibility for the provision of ambulance service in Ontario rests with the provincial government. The service is delivered by the Ministry of Health through the Ambulance Services Branch of the Ministry. The Ambulance Services Branch divides the province into six regions with Hamilton-Wentworth located in the Central Western Region.

### Statutory Basis

The statutory basis for the delivery of ambulance services in Ontario is The Ambulance Act, R.S.O. 1970 as amended by O. Reg. 670/75. The Act outlines the conditions under which operators shall provide ambulance service, the financing of said service and the manner in which inspections of ambulance services are to take place. Under The Ambulance Act, the Minister is empowered to, among other things, make regulations:

- a. prescribing the standards of conveyances and equipment for ambulance services and their maintenance and repair;
- b. governing the management, operation and use of ambulance services;
- c. prescribing the qualifications for persons employed in ambulance services, including their testing and examination;
- d. providing for the issuing of licences and prescribing terms and conditions of licences;
- e. prescribing the fees that may be charged by the operators of each class of ambulance service for each kind of service provided, the methods and times of payment of such fees to the operators and the proportion thereof that may be charged to the person transported in an ambulance.

### History

During the past decade a number of significant changes have taken place in the operation and financing of ambulance services in Ontario. A number of these changes have been pioneered in Hamilton-Wentworth.



Ambulance service was introduced as an insured program under the Provincial Health Care Plan on July 1, 1968. A major concern at the commencement of the new program was a lack of coordinated fleet movement in high volume areas. Ambulance operators were serviced by their own dispatching systems. This resulted in an uneconomic utilization of personnel and vehicles. Therefore, in late 1968, the Ministry of Health, in conjunction with Hamilton Civic Hospitals, implemented a central ambulance dispatch service at the Hamilton General Hospital. The centre served as a nucleus for all call activity in the Hamilton area and also served as a model situation for the development of other centralized dispatch systems.

Initially, the system was set up to handle calls for Ancaster, Burlington, Grimsby, Hamilton, Smithville and Waterdown. It was very successful. It allowed for the co-ordination of fleet movement, the maximization of vehicle availability, an increasing effectiveness of response to calls, and a greater accuracy of documentation. As well, an independent, centralized dispatching system precluded the goals of any one operator, in terms of calls, displacing those of the entire system.

Other changes followed. In 1969 the Ambulance Services Branch introduced the O.A.S.I.S. (Ontario Ambulance Services Informational System). This was largely in response to a need for comprehensive call-reporting and documentation. Among other things, O.A.S.I.S. provides the means whereby effectiveness of the service can be evaluated by prioritizing calls<sup>1</sup>. In late 1971, the Burlington service, previously self-dispatching, was integrated as part of the Hamilton dispatch system. This had an immediate effect on the number of calls handled by the system. However, this move was only temporary as, on January 1, 1974, Burlington was reoriented to an Oakville system which again had a substantial impact on calls.

By the time regional government was established it was clear that some of the areas originally included in the dispatching system had almost no relationship to the operational system centred at Hamilton. Partly for this reason, a comprehensive study was undertaken of ambulance services in the Regional Municipality of Hamilton-Wentworth<sup>2</sup>. The major conclusion reached was that the Regional Municipality should form the operations district. This study also dealt with questions of station location, the further development of in-service training, as well as providing an extensive commentary on response times in various parts of the Region.

1 See Appendix A for the definition of each type of call.

2 R. L. Horton, Report on Ambulance Service in Hamilton-Wentworth, (Toronto, Ontario Council of Health, 1975).





Presently, the Steering Committee for the East End Study of Health Services, which reports directly to the District Health Council, is investigating, among other things, the provision of ambulance services in east Hamilton and Stoney Creek. This committee was established in May, 1977 and is to report in March of 1978.

### Activities

Hamilton-Wentworth is serviced by four ambulance operators at six station locations (see Table 1). The four operators have the use of ten vehicles and two spares. Over the past ten years there has been a series of consolidations and amalgamations involving ambulance operators which has led to the creation of two large operators (Superior and Fleetwood) in the Region.

The primary purpose of ambulance services is the prompt, secure movement of sick or injured persons to medical facilities. The goal is to minimize the amount of pain, suffering and deaths among the users of the system. This necessitates a two-pronged development of ambulance services. The first is technical and focusses on maximizing vehicle use and deployment, bettering response and elapse times and making technological changes that further these goals. The other focusses on the human resource, on increasing the quality and scope of training of ambulance attendants to maximize their potential while the system is in use. The days when a driver attendant need only be able to get from point A to point B quickly in order to do a good job are long past.

Comparative data available for the year 1976 indicates that Hamilton-Wentworth ambulance service is of comparable quality to that offered in other major Ontario municipalities. Hamilton-Wentworth has a higher pattern of calls on a per capita basis and a higher pattern of patient-carrying calls per vehicle (see Table 2). This data indicates that Hamilton-Wentworth makes more economic use of resources, a view which tends to be supported by other evidence presented later in this report.

### Technical Data

Table 3 indicates that for the period 1970-76 the number of calls almost doubled. In the early years, the rate of increase of high-priority calls (i.e. categories 3 and 4) was much greater than for low priority (categories 1 and 2), while in the mid 1970's the situation began to reverse itself. Increasing population cannot explain this pattern of growth (see Table 4). Rather, it would seem that changes in the health care system and greater public awareness of the service can to a significant extent.



TABLE 1      AMBULANCE SERVICES IN HAMILTON-WENTWORTH REGION 1977

Operator	Locations	No. of Vehicles	Employees	
			F.T.	P.T.
Danver Ambulance Service	22 Mill St. Waterdown	1	3	10
Fleetwood Ambulance Service	(1) 87 Locke St. S. (2) 538 Upper Sherman	4 + 1 spare	26	1
Superior Ambulance Service	(1) 1339 Barton St. E. (2) 112 Mohawk Rd. E.	4 + 1 spare	24	5
Township of Ancaster <sup>1</sup> Ambulance Service	336 Wilson St. E.	1		8
TOTAL		10 + 2	53	24

<sup>1</sup> Ancaster Ambulance employees are also fire fighters.

Source: Ambulance Services Branch, Ministry of Health



MAP 1  
AMBULANCE STATION LOCATIONS IN HAMILTON-WENTWORTH

10.

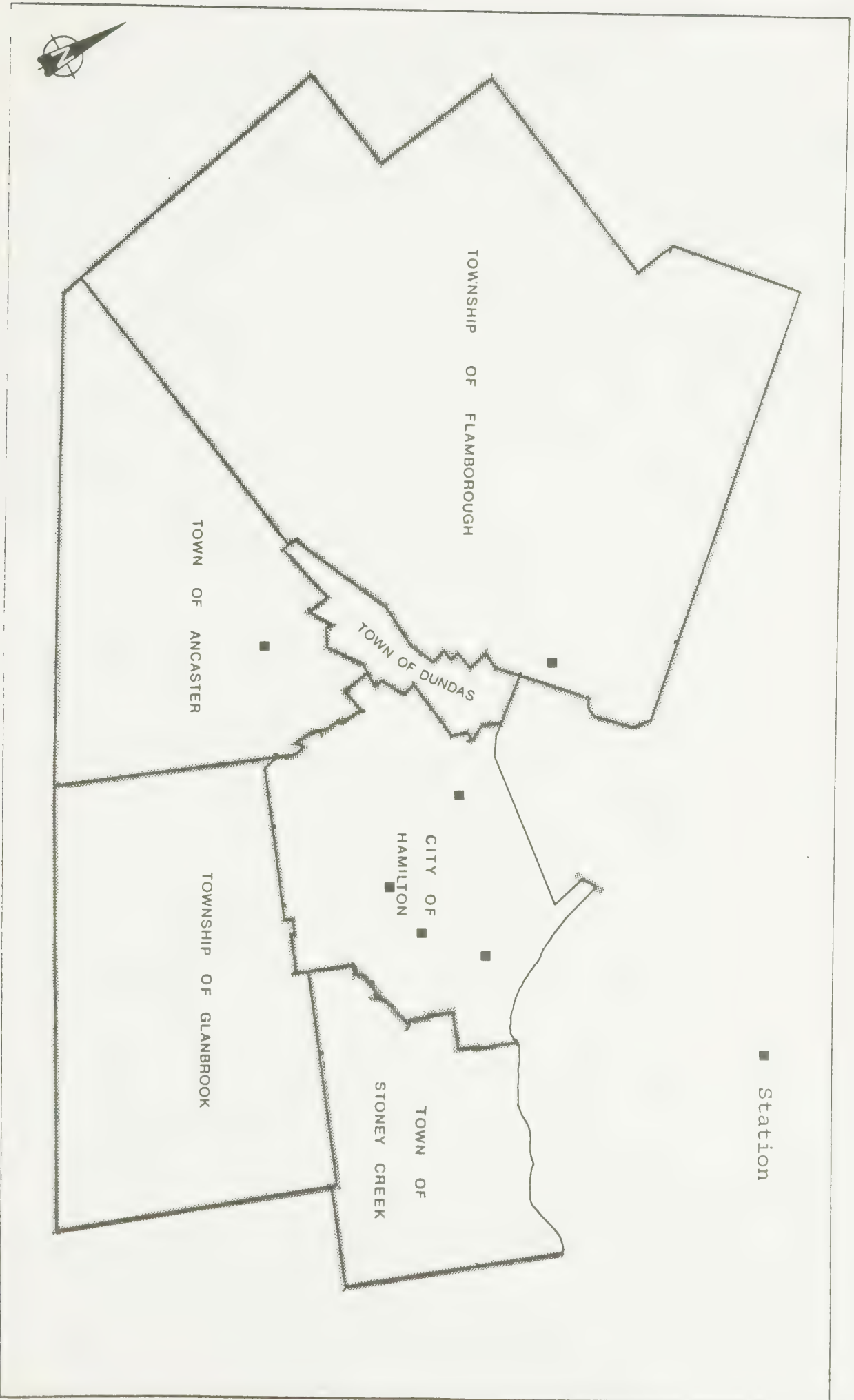






TABLE 2                      COMPARATIVE DATA, AMBULANCE SERVICES IN  
MAJOR ONTARIO MUNICIPALITIES, 1976

Category	Metropolitan Toronto	Ottawa- Carleton	Hamilton- Wentworth
Square miles served	241	600	182
Population served	2,256,000	500,000	400,000
Number of patient carrying calls	148,975 <sup>1</sup>	27,663	27,750
Calls per day per 100,000 population	14.1	15.2	19.0
Number of patient miles per call	6.0 <sup>1</sup>	6.0	5.4
Number of operational vehicles			
-Total	78	13	10
-Day	66	10	8
-Night	33	5	4
Number of patient carrying calls per vehicle			
-1 year	1,818	2,127	2,775
-1 day	4.98	5.8	7.60
Number of vehicles per 100,000 population			
-Total	2.8	2.6	2.5
operational -Day	2.4	2.0	2.0
-Night	1.2	1.0	1.0
Number of staff - Driver Attendants	426	50	50
Number of Driver Attendants per 100,000 population <sup>2</sup>	15.5	10.6	12.5

1 Estimate provided by Metropolitan Toronto Ambulance Services

2 As calculated by the Ministry of Health

Source: Ambulance Services Branch, Ministry of Health



TABLE 3 INCREASE OF CALLS BY TOTAL AND BY HIGH AND LOW PRIORITY FOR SELECTED YEARS

Year	Total Calls Dispatched	Increase	High Priority Calls	Increase	Low Priority Calls	Increase
1970	15,242	2,022(15.3)	8,226	2,376(40.6)	7,016	-354(-5.0)
1971	18,562	3,320(21.8)	11,717	3,491(42.3)	6,845	-171(-2.0)
1972 <sup>1</sup>	21,041	2,479(13.4)	12,859	1,142(9.7)	8,191	1,346(19.6)
1973	23,605	2,564(12.2)	13,710	851(6.6)	9,895	1,704(20.8)
1974	28,080	4,475(19.0)	16,024	2,314(16.8)	12,056	2,161(21.8)
1976	30,356	2,276(8.1)	16,817	793(4.9)	12,986	930(7.7)
Increase 1976/1970		15,114(99.2)		8,591(104.4)		5,970(85.1)

1 For years 1972-74, a portion of the calls are from Burlington

Sources: R. L. Horton, Report on Ambulance Service in Hamilton-Wentworth, (Toronto, Ontario Council Of Health, 1975) and Ambulance Services Branch



TABLE 4 COMPARATIVE GROWTH 1969-1976, POPULATION AND AMBULANCE CALLS

Year	Population Increase %	Total Call Increase %	High Priority Increase %	Low Priority Increase %
1970	.9	15.3	40.6	-5.0
1971	1.2	21.8	42.3	-2.0
1972	.9	13.4	9.7	19.6
1973	.2	12.2	6.6	20.8
1974	.7	19.0	16.8	21.8
1976	1.9	8.1	4.9	7.7

Source: Same as Table 3



While calls have increased quickly, Table 5 provides some indication of the distribution of the calls among the various operators. Clearly, Superior and Fleetwood respond to most of the calls. In Ancaster, central dispatching has obviously followed the recommendation of the Horton Report to increase high priority use of the Ancaster service in the far western section of the City of Hamilton.

The evaluation of calls as to total and to type does not provide a complete understanding of service levels. Consideration must also be given to response time and elapsed time. Figures available for the period up to 1974 reveal that in Hamilton-Wentworth there were noticeable improvements in response time (see Table 6). From 1972-74 the numbers of calls taking ten minutes or less to answer increased from 89.2% to 95.6% of the total number of calls while the number of calls requiring ten or more minutes declined from 10.8% to 4.4% of the total number of calls. This occurred during a period when the volume of calls dispatched increased by 33.4% and staff and vehicles remained the same.

This measurement, of course, falls short on three counts. First, response time refers only to the time period from receipt of call to arrival at the scene. For a more complete analysis we must look at the elapsed time - that is, time from receipt of call to arrival at final destination (i.e. hospital). Second, consideration must be given to calls and elapsed time with reference to the various parts of the region and, third, to the proportion of the calls that come from the various areas of the region.

By far the largest number of calls originate in the City of Hamilton (see Table 7) - almost 90%, whereas the rest of the Region accounts for only 10%. This figure is also reflected in demand per vehicle. For the January-September 1974 period, rural demand per vehicle represented only 27 per cent to 42 per cent of City demand per vehicle.<sup>1</sup> There are also significant differences in elapsed time between urban and suburban-rural areas. Tables 8 and 9 show that elapsed times are much lower in the core of the Region than in suburban and rural areas. These Tables are based on a nine-month period and may appear relatively dated (1974). We have not received any information which leads us to believe qualitative change has taken place in the intervening years. On the contrary, during conversations with various officials, we were informed that the differences have continued but that total elapsed time for all categories had decreased somewhat and at a uniform rate. If so, on a weekday it can still take up to nearly 40 per cent longer to be taken to hospital by ambulance if one lives in a rural or suburban location than if one lives in the City.

1 Ibid.





Operator	Year	Priorities 1-4 <sup>1</sup>	Priorities 1-2	Priorities 3-4
Superior	1973 <sup>2</sup>	7,425	3,566	3,859
	1974	9,144	4,149	4,995
	1976	13,702	6,170	7,532
(Jan. 1-June 30)	1977	7,020	3,264	3,756
Fleetwood	1973 <sup>3</sup>	8,412	3,609	4,803
	1974	9,246	3,879	5,367
	1976	13,695	5,978	7,717
(Jan. 1-June 30)	1977	6,810	3,059	3,751
Danver	1973	489	110	379
	1974	728	177	551
	1976 <sup>4</sup>	1,345	504	841
(Jan. 1-June 30)	1977	646	219	427
Ancaster	1973	393	67	326
	1974	539	164	375
	1976	889	246	643
(Jan. 1-June 30)	1977	460	158	302
TOTAL	1973	16,719	7,352	9,367
	1974	19,657	8,369	11,297



TABLE 5 (Cont.)

Operator	Year	Priorities 1-4	Priorities 1-2	Priorities 3-4
TOTAL	1976	29,621	12,986	16,817
(Jan. 1-June 30) 1977	1977	14,936	6,700	8,236

1 Priority ranks refer to urgency of call. See Appendix A

2 Superior figures for 1973 are a combination of Superior-Clark services as the two were amalgamated in 1973

3 Fleetwood figures for 1973 are a combination of Fleetwood-Cook services as the two were amalgamated in 1974

4 Denver took over from V. Patton Ambulance Service in July, 1976

5 Calls for years 1973 and 1974 represent totals for the January 1-September 30 period

Sources: Same as Table 3



TABLE 6                      AVERAGE RESPONSE TIME<sup>1</sup>, HAMILTON-  
WENTWORTH, FOR SELECTED YEARS

Year	Response Period	% Answered
1972	0-8 min.	80.0
	8-10 min.	9.2
	10-15 min.	8.3
	15+ min.	2.5
1973	0-8 min.	82.9
	8-10 min.	8.7
	10-15 min.	7.6
	15+ min.	.8
1974	0-8 min.	85.8
	8-10 min.	9.8
	10-15 min.	3.7
	15+ min.	.7

1    Response Time means time period from receipt of  
call until arrival of ambulance at the scene.

Source:    R. L. Horton, Ambulance Service in Hamilton-  
Wentworth, (Toronto, Ontario Council of  
Health, 1975)





TABLE 7                    DISTRIBUTION OF EMERGENCY CALLS BY  
                             AREA MUNICIPALITY FOR PERIOD  
                             JANUARY 1 - SEPTEMBER 30, 1974

Area Municipality	Number of Calls	%
Ancaster	213	2.2
Dundas	203	2.1
Flamborough	281	2.9
Glanbrook	135	1.4
Hamilton	8,649	89.4
Stoney Creek	194	2.0
TOTAL	9,675	100.0

Source:    Same as Table 6



TABLE 8      SUMMARY OF MEAN AVERAGE TIME ELAPSE FOR LOW PRIORITY CALLS<sup>1</sup>

Shift	Weekdays			Weekends		
	Total Calls	Core	Rural- Suburban	Total Calls	Core	Rural Suburban
00-08	52.6 min.	50.9 min.	59.8 min.	41.7 min.	38 min.	52.8 min.
08-16	43        "	41.3        "	49.5        "	41 <sup>2</sup> "	41        "	41 <sup>2</sup> "
16-00	39.7 <sup>2</sup> "	39.7        "	39.7 <sup>2</sup> "	45 <sup>2</sup> "	45        "	45 <sup>2</sup> "

<sup>1</sup>Same as footnote 1 in Table 6.

<sup>2</sup>Due to low frequency of low priority calls occurring in rural areas during these periods, calls were all lumped under the core category. As a result, rural-suburban calls are not recorded with great accuracy.

Source:      Same as Table 7



TABLE 9 SUMMARY OF MEAN AVERAGE TIME ELAPSE FOR HIGH PRIORITY CALLS<sup>1</sup>

Shift	Weekdays			Weekends		
	Total Calls	Core	Rural- Suburban	Total Calls	Core	Rural- Suburban
00-08	37.5 min.	34.7 min.	48.5 min.	37 min.	33.7 min	48.1 min.
08-16	35.6 "	33.6 "	43.3 "	35.4 "	31.7 "	46.2 "
16-00	35.3 "	31.9 "	43.4 "	36.9 "	32.4 "	48 "

<sup>1</sup>Time elapse is time from departure to clearance at the destination. Data used is from the month of October, 1974. Calls picked were proportioned to annual totals in terms of high/low priority, to shift, to urban/suburban-rural calls and to weekdays/weekend.

Source: Same as Table 8



## Personnel Training and Development

Ambulance personnel, through their training, can have a profound effect on service levels. Over the past several years a greater emphasis has been placed on developing training programs for ambulance employees and there have been a number of changes as a result. In particular, revisions to The Ambulance Act in 1975 changed a system whereby ambulance attendants had received financial rewards for taking courses to one in which new regulations stipulate mandatory training requirements.

According to the regulations presently in force, driver attendants hired after August 1, 1975 must have completed a community college ambulance and emergency care program or its equivalent by August 1, 1979. All driver attendants hired after August 1, 1977 must have completed a community college ambulance and emergency care program or its equivalent. To assist driver attendants in meeting these requirements, a number of community colleges have established ambulance attendant programs. Niagara and Humber Colleges offer a part-time course for presently employed ambulance attendants. In 1977 Mohawk College started a full-time ambulance attendant program.

In Hamilton-Wentworth the level of training of ambulance personnel is beginning to reflect the changes in legislation. As an example, area ambulance employees received cardio-pulmonary resuscitation training in the past year. While there are variations among the staffs of the operators in the percentage of personnel with community college, casualty care and other types of training, the new regulations are having some impact in ensuring a uniformly high basic level of training for ambulance attendants. Whether in time it will become too high is debatable.

## Resources

On an annual basis ambulance operators submit a budget to the Ambulance Services Branch. Once the Branch receives its overall provincial budget, the funds are then divided by region on a service by service basis. When this process is completed the operators are advised and then may be asked to resubmit their budgets. With four operators in Hamilton-Wentworth, the annualized operating budget for 1977 was \$1,682,728. While 1977 provincial figures are not available, 1975 per capita costs in Hamilton-Wentworth were significantly below the provincial average (see Table 10). In comparison to other major municipalities, Hamilton-Wentworth also ranks very well (see Table 11). While its per capita costs are between those of Toronto and Ottawa, Hamilton-Wentworth has the lowest cost per patient carrying call and lowest cost per patient mile.





TABLE 10                      CONSOLIDATED AMBULANCE SERVICE OPERATING  
BUDGETS AND PER CAPITA COSTS, 1975 - 1977

	1975 \$	1976 \$	1977 \$
Total cost in Hamilton-Wentworth	1,371,767	1,300,000	1,682,728
Per capita cost in Hamilton-Wentworth	3.36	3.18	4.09
Provincial per capita cost	3.63	n.a.	n.a.

Source: Ambulance Services Branch, Ministry of Health



TABLE 11      COMPARATIVE FINANCIAL DATA, MAJOR ONTARIO MUNICIPALITIES, 1976

Category	Toronto			
	Provincial Funding \$	Actual Including Mun. Funding \$	Ottawa \$	Hamilton \$
Operating budget	8,200,000	11,500,000 (est.)	1,200,000	1,300,000
Cost per capita	2.63	5.09	2.70	3.35
Cost per patient Carrying call	55.04	77.19	48.79	48.32
Cost per patient Mile	9.68	10.39	8.13	8.94

Source:      Same as Table 10



The present fee structure is \$25.00 per call for insured people with O.H.I.P. paying \$20.00 and the patient \$5.00. In those cases where the trip from point of departure to the hospital is greater than 25 miles, the patient is billed at a rate of .15/mile for each mile beyond 25 to a maximum cost of \$25.00. The uninsured rate is \$25.00 per call and an additional .60/mile for each mile over 25 with no maximum.

In terms of equipment and complement, as indicated, Hamilton-Wentworth is serviced by ten vehicles and a driver attendant complement of 53 full-time and 24 part-time employees. Dispatch crews are employees of the Hamilton General Hospital and presently total eight (see Table 12). Since 1972 the dispatch centre has been able to handle the increasing volume of calls without having to increase the number of active personnel.

In 1977 the ambulance operators completed the changeover of their mobile radios from 15 watts to 30 watts with a resultant increase in range. In 1978, it is anticipated that the Hamilton-Wentworth dispatch centre will be refurbished with new radio equipment. The new equipment will provide better coverage by eliminating some of the blind spots presently in existence and will also add to the level of support for ambulance crews. The new equipment makes possible telemetry (e.g. cardiac monitoring of patient while in transit). It will make paging available, which is of special significance to Waterdown where crews are on standby. The new equipment will also include a telephone-radio patch system which will enable a physician to phone the dispatch centre and be put directly through to the vehicle. This new system will also cover a larger area with the addition to the Hamilton dispatch system of Brantford with approximately 4000 calls per annum. The estimated equipment and installation costs are \$135,000 and Ministry officials have stated that the effect on operational costs will be marginal with a likely increase of dispatch complement of .5 men. The operational date for this system is August or September 1978.

### Issues

The issues associated with ambulance services in the Region can be summarized as follows:

1. There is a variation in elapsed times in various parts of the Region. The number of calls where the response time is ten minutes or more has dropped. Few other comparable areas can match the present level of service in Hamilton-Wentworth, achieved primarily through good fleet activity coordination and the co-operative attitude in regard to transfers at hospitals. However, variation in service quality must be a matter of concern. The Horton Report concluded that





TABLE 12 DISPATCH CENTRE COMPLEMENT FOR SELECTIVE YEARS

Year	Dispatchers	Active Supervisory	Total Active	Supervisory	Total Calls Dispatched	Calls per Active Person
1969	3	1 Asst.	4	1	13,220	3,305
1970	4	1 Asst.	5	1	15,242	3,040
1971	4	2 Senior	6	1	18,562	3,090
1972	5	2 Senior	7	1	21,041	3,006
1973	5	2 Senior	7	1	23,605	3,372
1974	5	2 Senior	7	1	28,080	4,011
1976	5	2 <sup>1</sup>	7	1	30,356	4,337
1977 (Jan. 1-) (June 30)	5	2 <sup>2</sup>	7	1	15,190	2,170

- 1 Refers to Senior Dispatchers
- 2 Refers to 1 Senior Dispatcher and 1 A/ Supervisor

Sources: Ambulance Services Branch, Ministry of Health and the Horton Report



improvements in elapsed time in rural areas would require significant increases in the number of personnel, vehicles and hence funding. Closely related to elapsed time is station location. Ambulance sites have been shifted over a ten year period with the aim of maximizing site location in relation to response time. Data available would indicate that existing stations are well located for the Region as a whole. In this regard the Horton Report concluded that moving existing station sites would have a minimal effect and might in fact weaken elapsed times in other areas as a consequence.

2. A related matter is the impact of proposed regional development plans on station locations. A significant amount of the growth in the Region is earmarked for Stoney Creek and Waterdown. Proposed development in Stoney Creek may lead to the necessity of reconsidering the present east-end station while proposed development in Waterdown may require reconsideration of the character of the station presently located in Waterdown.
3. The long-term purpose of ambulance service requires consideration. In the recent past, the Province of Ontario through the Ambulance Services Branch has taken some significant steps in the direction of professionalizing ambulance service. While the level of training now required is commendable, it is essential to bear in mind that the prime purpose of the ambulance service is to transport the patient to a hospital or medical facility, not to replace that facility. Similarly, the prime purpose of an ambulance attendant is to secure a patient for medical care, not to eliminate that need by satisfying it while in transit. A fine line has to be drawn in matters of this sort, a distinction between providing the necessary personnel, equipment and expertise to deliver ambulance service, and providing those things to deliver something besides ambulance care. It may be difficult to stipulate when expert ambulance service becomes paramedical service, but it is easy to understand the cost implications of such upgrading.
4. Another training matter concerns the legislative changes adopted in 1975. The new training requirements do not apply to ambulance employees hired previous to August 1, 1975. This "grandfather clause" may be a potential problem. Presently, a rather small percentage of ambulance attendants meet the new requirements. Of those who do not, a large proportion are protected by the grandfather clause. In our discussions with Ministry personnel we were informed that a significant proportion of these individuals are presently enrolled part-time in the community college program. We have been told that informally the two major operators each hope to graduate four of their staff per year from the part-time program.



5. Another issue relates to the changing character of the health care system in the Province of Ontario. For a variety of reasons the Province is engaged in the process of officially designating hospitals for particular specialties. While this may mean certain economies are realized and better specialized services for the patient, it may mean increased workload and travelling time for ambulance operators and a consequent need for more resources to maintain existing levels of service.
6. A final matter of potential concern is the proposal by the Hamilton-Wentworth Region to introduce the 9-1-1 emergency phone system. In other parts of the province this system has led to a delay in ambulance service response as calls were relayed to the ambulance system. However, in Hamilton-Wentworth, an ambulance employee is part of a working group preparing for implementation of this system. Such liaison should enable any difficulties of this sort to be overcome. In terms of the new radio equipment discussed earlier, technically and operationally, 9-1-1 presents no problems for the new system.

### Options

There are three basic alternatives for the delivery of ambulance service in Hamilton-Wentworth:

The first option would be to hand over organizational responsibility to the six area municipalities. There do not seem to be any advantages to such a move. Conceivably it could lead to the fragmentation of the dispatch system and a resultant deterioration of response and elapse times and an uneconomic utilization of resources. Nor are there any organizational problems with the existing system which would be resolved by the area municipal option. As well, it would likely lead to a reconsideration of the plan to adopt the 9-1-1 emergency telephone system.

A second alternative would be to transfer organizational responsibility to the Region. With this alternative as well as the first alternative, the provincial government would continue to finance the service. Again it is unclear what benefits would accrue from such a move. With assumption of the service by the Region a centralized dispatch system could be maintained, although the modernization proposed for the dispatch centre would have to be reassessed given that at least part of the rationale for this modernization is the addition of Brantford to the dispatch system. With Regional responsibility, the service could either be provided directly by the Region or the Region could maintain the existing operators. It is also possible to argue not only for the transfer of organizational responsibility to the Region but for the transfer of complete financial



responsibility or a portion thereof to the Region. The suggested logic for such a move is to make the level of government responsible for delivery of a service more sensitive to the costs of such a service. However, what specific advantages are to be gained from such a move have not been clearly articulated.

The third option would be to maintain the existing arrangements. Given the relatively good response and elapse times, the well-developed station sites and the fact that the problems which do exist are not organizational in nature, the third option seems to be the most sensible.

### Conclusions

Ambulance service in Hamilton-Wentworth appears generally satisfactory. There are no problems peculiar to the Region. That of slower service in rural and suburban districts of the Region will require continual attention and application by the Branch. Short of giving consideration to restructuring the service district as a means of ameliorating differences in elapse times, incremental change is the most likely avenue of successful change.





## EMERGENCY MEASURES

### Introduction

Responsibility for emergency measures presently rests with Hamilton-Wentworth Region. The services themselves had their roots in the creation of the Canadian Emergency Measures Organization within the Privy Council Office in 1957. Under this organization the program costs were to be shared by the three levels of government with the Province and Ottawa assuming the bulk of the costs. At the federal level this program was replaced by the National Emergency Planning Establishment in 1974.

Provincial involvement in emergency measures was directed by the Emergency Measures Branch of the Ministry of the Solicitor-General. The Branch was responsible for assisting municipalities in the drafting of emergency plans and coordinating the activities of the provincial government in this area. However, in April, 1975 the Ontario Provincial Treasurer announced a government decision to withdraw financial support from the Emergency Measures Program in Ontario and to phase out the Emergency Measures Branch by December 31, 1975. In its place the Government established a Lead Ministry Concept which is a procedure by which municipalities may request assistance from the provincial government through the Ministry responsible. In the meantime, the federal government has continued its financing, with the municipalities obtaining grants directly from that level.

The statutory basis for the service is fragmented, consisting principally of The War Measures Act (Federal), Bylaw 69-74 (Regional Municipality of Hamilton-Wentworth), The Emergency Measures Act, R.S.O. 1970 as amended by The Reorganization of Government Act, 1972 (Provincial) and Order-in-Council Number O.C. 1487/75 (Provincial). The War Measures Act prescribes the procedures to be enacted by the federal government in the event of a national emergency. By-law 69-74 established a plan for the coordination of emergency services in the event of an emergency. The Emergency Measures Act requires that Civil Emergency Plans be prepared for all municipalities, regions and counties to provide the continued operation of government in the event of a natural emergency. Order-in-Council 1487/75 provides for the Lead Ministry approach whereby various ministries assume overall leadership for different sorts of emergencies.

### Activities

Most of the activities related to the performance of this system are of two types - anticipatory planning and liaison with interested groups. In regard to the first,



several documents have been produced including a Disaster Procedures Manual, which outlines procedures for disasters of varying type and scope, a Vital Services Directory, which provides a listing of various agencies, services and expertise that may be called upon in the event of an emergency as well as a Wartime Emergency Plan and a Peacetime Emergency Plan. The second major function relates to liaison with interested groups. Generally, this function is performed by the Emergency Measures Planning Officer and involves maintaining contact with various departments of government which may be involved in the event of an emergency (e.g. Works, National Defence, Fire Departments, School Boards, Environment) as well as maintaining contact with various volunteer groups whose assistance may be important in the event of an emergency (e.g. Auxiliary Police, Hamilton Beach Rescue Unit, snowmobile clubs, CB radio clubs).

The Planning Officer also performs a variety of other functions. There is the need to liaise with surrounding regions and to develop procedures for assistance, to develop training programs and simulation exercises, to coordinate disaster procedures with those of major industries and, as necessary, to update the Disaster Procedures Manual and Vital Services Directory. Presently there are also monthly meetings of the Emergency Measures Planning Organization and committee duties that may arise out of the striking of ad hoc committees in the area. Examples of the latter type are the monthly meetings with the heads of hospital emergency departments, ambulance companies and the Hamilton Fire Department, and the meetings of the Hamilton District Emergency Care Committee. In essence, the major activity is the maintenance of the overall system in a high state of preparedness.

In the event of an emergency the disaster procedures go into effect. Situations requiring the response of a number of services and agencies are under the overall authority and responsibility of the Mayor and Council of the affected municipality or the Regional Chairman and Council. If the situation cannot be dealt with by municipal resources the Mayor may then request the Regional Chairman to coordinate and control the situation. When Regional resources are inadequate assistance can then be requested from the provincial government under the Lead Ministry Concept and from the federal government. The decision to implement the Regional Disaster Alert System is the responsibility of the Regional Chairman or Alternate. It is the responsibility of the Duty Inspector, Hamilton-Wentworth Regional Police, when advised to implement the alert, to notify the Regional Disaster Control Group. It is then the responsibility of these members to notify the personnel under their control. Generally speaking, operational control rests with the police, although in certain types of disasters (e.g. fire, explosions) the senior fire department officer would be in overall command and the police would then assume a coordinative function.



## Resources

Until December of 1975, financing for this service was the responsibility of the federal, provincial and regional governments. Since that time, however, an increasing proportion of the budget has been absorbed by the Regional Government (see Table 13). Over the period 1975-76, the Region phased out full-time staff involved in Emergency Measures and since late 1976 has been without a full-time Emergency Measures Planning Officer. The position is now part-time, with some responsibilities assumed by police personnel and the Regional Coordinator. In terms of equipment, Emergency Measures no longer carries out line activities. Equipment has been distributed to appropriate departments. An up-to-date inventory of equipment which might be needed is maintained.

## Issues

At the macro-level, there are no major problems or issues outstanding.

In terms of devising standard operating procedures, the Region presently has a complex and comprehensive set of manuals which are continually maintained. The chain of command is clearly established and procedures for notifying various authorities are also well presented. Liaison with volunteer groups and organizations is also effective. Existing personnel appear to appreciate the importance of such groups and attempt to involve them in training and simulation exercises in order to maintain their interest and preparedness. As an example, during the airshow at Mt. Hope Airport in 1977, an airport disaster was simulated. Regular training is provided for the Auxiliary Police. Simulations and training exercises for other volunteer groups, such as radio operators, have also been staged.

The absence of a full-time Emergency Measures Planning Officer does not seem to have adversely affected emergency measures services in the Region. Conversations with various officials indicated that the amount of work involved does not justify a full-time official. The position is currently filled on a part-time basis by a member of the Regional Works Department - an arrangement which seems both sensible and economic.

A minor concern voiced relates to the dispatching of disaster site victims to the hospitals with the required specialties. Presently, there is no formalized procedure whereby this would take place. However, this matter, among others, is presently being studied by the Hamilton District Emergency Care Committee. This committee is a standing committee of the Health Services Committee which is itself a standing committee of the Hamilton District Health Council. This committee is also attempting to integrate more closely



2  
3  
TABLE 13 EXPENDITURES ON EMERGENCY MEASURES 1974-1977

	1974 \$	1975 \$	1976 \$	1977* \$
Total Expenditures	29,285	39,110	53,520	37,050
Salaries, Wages and Benefits (%)	22,987 (78.5)	32,454 (83.0)	45,674 (85.3)	28,060 (75.7)
Other (%)	6,298 (21.5)	6,656 (17.0)	7,846 (14.7)	8,990 (24.3)
Provincial Contribution (%)	25,028 (85.5)	32,217 (82.4)	20,760 (38.8)	18,520 (50.0)
Net Regional Expenditure (%)	4,257 (14.5)	6,893 (17.6)	32,760 (61.2)	18,530 (50.0)

\* Budget Figures

Source: Regional Finance Department





the disaster plans of the various hospitals and the Region's emergency plan. As the Province continues the process of officially designating specialty centres the problem of hospital prerogative should lessen. At this time it is not possible to predict the findings or the success of the Hamilton District Emergency Care Committee in this matter.

Another concern is in the area of communications. Presently, fire, police and ambulance are on a different communications band. Therefore, communications would be maintained at a disaster site by switching walkie-talkies. In the case of ambulances, the new communications system with its telephone patching system should eliminate this problem. Police and fire personnel can also patch through on each other's system. While this is not an optimal situation, especially if the disaster site is in an outlying area of the Region, technical considerations preclude sharing one channel. Implementation of the 9-1-1 system would improve communications capacity in an emergency provided, of course, that telephone communications are not also out of order.

### Options

A return to the city/county system would not likely deliver any benefits and may in the areas of communications, staffing, liaison, and plan preparation detract from the level of service which could be expected in the event of an emergency. A reform of this type would only be justifiable if there were marked difficulties in the administration and development of a state of preparedness. Our investigations have not uncovered any difficulties of this sort.

The movement to a single-tier system should not affect emergency measures very much. Depending on the character of the transition, a spillover effect might be to alienate, at least in the short run, the volunteer fire departments, which can be an important community link in the event of an emergency in outlying areas.

A third alternative, to maintain the system as is, from the perspective of emergency measures is the most sensible. As previously indicated, emergency measures services are adequately maintained at the present time.

### Conclusion

An initial concern revolved around provincial withdrawal from the area. It seems clear that the level of service has not been adversely affected by the Province's actions. Financially, it has placed an additional demand on the Region's resources but it is clear that in the areas of pre-planning and liaison the Region is adequately served by the existing arrangements.



## FIRE PROTECTION

### Introduction

Fire protection in Hamilton-Wentworth is the responsibility of the six area municipalities. This local function consists of two primary activities, namely fire fighting and fire prevention. The former involves the rational deployment of men, equipment and facilities in order to respond to and to extinguish quickly those fires which occur. The objective of the latter is to prevent fires from occurring. In this regard, fire prevention activity includes the routine inspection of existing industrial, commercial, institutional and residential properties; inspection and comment upon building plans; and public education programs.

There are eleven municipal fire departments within the Region. All municipalities except the Townships of Flamborough and Glanbrook have unified departments under the direction of a full-time fire chief. Flamborough has five fire departments each headed by a volunteer chief while Glanbrook has two. An overview of the wide range of fire protection services in the Region may be gained by examining Table 14. There are 751 fire fighters in the Region and just over 60% of them are full-time, paid personnel. Most of the full-time fire fighters are members of the Hamilton force, the only full-time fire department. The remaining full-time personnel are members of the composite departments in Ancaster, Dundas and Stoney Creek. It is also evident that volunteers are a significant component of fire protection in Hamilton-Wentworth. The departments in Flamborough and Glanbrook are manned completely by volunteers, who are also an important resource for the three composite departments. The Region's fire fighters operate out of 22 fire stations approximately half of which are in the City of Hamilton. With respect to fire protection expenditures, the City of Hamilton, with three-quarters of the Region's population and equalized assessment, accounts for almost 90% of the total spending on this local service.

The current situation with respect to fire protection is not too much different than that which existed prior to 1974. The change in area municipality boundaries which accompanied the establishment of the Region did not create very many difficult organizational problems for local fire departments. The boundaries of the City of Hamilton did not change and therefore no adjustment in fire protection arrangements was necessary. A similar situation existed in the new Town of Stoney Creek which was created by the amalgamation of the old town with Saltfleet Township. A joint Stoney Creek-Saltfleet fire department had been in existence since 1968. The boundaries of the Town of Dundas underwent a modest expansion while those of Ancaster were reduced slightly.



TABLE 14 MUNICIPAL FIRE DEPARTMENTS IN THE HAMILTON-WENTWORTH REGION, 1977

Municipality	Population	Area (sq.mi.)	Equalized Assessment	Council Committee	Fire F.T.	Fighters Vol.	Fire Stations	Fire Budget
			\$					\$
Ancaster	14,118	67.0	126,616,325	-	8	16	1	240,629
Dundas	19,328	10.6	177,321,268	Fire Pre- vention and Services	16	20	1	464,894
Flamborough	23,867	183.0	227,770,534	Fire	-	123	5	302,871
Glanbrook	10,039	77.0	85,548,365	Road and Fire	-	49	2	57,050
Hamilton	311,907	54.4	3,051,911,826	Legislation, Fire and Licensing	437	-	10 <sup>1</sup>	9,621,310
Stoney Creek	32,099	37.4	321,332,732	Fire and Licensing	7	75	3	320,870
REGION	411,358	429.4	3,990,501,050	-	468	283	22	11,007,624
1	Includes facility at Mt. Hope Airport.							

Sources: (1) Andre Bernard et al., Profile: Hamilton-Wentworth, (Ottawa: Information Canada, 1975).  
(2) Population data provided by the Hamilton-Wentworth Regional Planning and Development Department.  
(3) Assessment data obtained from Regional budget documents.  
(4) Other information provided by officers and fire chiefs of the area municipalities.





Neither of these changes affected the fire protection situation in either municipality with respect to the location of stations or the deployment of men and equipment. However, Ancaster did enter into a formal fire protection agreement with Flamborough in March, 1974 for a portion of its territory along Highway 99. The major changes, as a result of boundary changes, occurred in the newly-created Townships of Flamborough and Glanbrook, although even these changes appeared to take place smoothly. Glanbrook, an amalgamation of the former Townships of Glanford and Binbrook, retained the two existing fire stations at Mount Hope (Glanford) and Binbrook as well as their volunteer chiefs. The situation in Flamborough was somewhat more complex. The new township consisted of the former municipalities of Beverly, West Flamborough, East Flamborough and Waterdown. The latter three municipalities had participated in a common fire area prior to regionalization with stations located in Waterdown, Freelon and Greenville. The Township of Beverly had two stations located at Rockton and Lynden. Therefore, the creation of Flamborough meant the addition of the Rockton and Lynden stations to the fire area shared by the other three municipalities. The expansion of the fire area to cover the boundaries of the new township went smoothly enough. However, a unified department was not created in that five departments headed by five chiefs were retained. The net result for the Region, as depicted in Table 14, was the creation of six new area municipalities but the retention of the existing eleven fire departments. However, leaving fire protection as a responsibility of the area municipalities was consistent with the recommendations of both the Steele Commission<sup>1</sup> (November, 1969) and the Provincial reform proposals<sup>2</sup> which followed later (January, 1973).

### Statutory Basis

Under The Municipal Act, fire protection is a permissive rather than a mandatory function. Of course, most municipalities in Ontario provide fire protection services; however, it is evident that this is one area of local responsibility where a municipal council can exercise wide discretion given the relative absence of compulsory provincial standards and regulations. Accordingly, wide variation in the quality and level of services provided exists and this stands in sharp contrast to the strong provincial control and supervision exerted over municipal police forces.

- 1 Hamilton-Burlington-Wentworth Local Government Review, Report and Recommendations, (Toronto: Department of Municipal Affairs, 1969), pp. 121-122.
- 2 Proposals for Local Government Reform in the Area West of Metropolitan Toronto, (Toronto: Ministry of Treasury, Economics and Intergovernmental Affairs, 1973), p. 50.





There are, however, several provincial statutes which specify a minimal role for the Province in the area of fire protection. For example, The Fire Departments' Act regulates working conditions for full-time firemen in Ontario. A somewhat more significant statute is The Fire Marshal's Act. This statute gives the Ontario Fire Marshal and his staff certain powers and duties. First, the Office of the Fire Marshal conducts investigations into suspected arsons, fires involving losses of \$250,000 and over, fatal fires and gas explosions. Second, the Office provides fire training services for municipal fire fighters principally through the Ontario Fire College at Gravenhurst as well as the various regional fire fighting and fire prevention schools which are held annually in different areas of the province. Third, staff of the Office of the Fire Marshal keep a record of fires, fire deaths, injuries and fire loss in Ontario. This information must be provided by both local fire departments as well as insurance companies. Fourth, the Act empowers the Fire Marshal to lay down standards for hydrants, hose couplings and other fire fighting equipment in order to ensure inter-municipal compatibility. Fifth, the Office of the Fire Marshal carries out an extensive public information service and materials pertaining to fire prevention are supplied not only to municipal fire departments but also to businesses, schools, libraries and any other interested parties. Finally, a very significant activity of the Office of the Fire Marshal is to advise and assist municipalities in improving the effectiveness of their fire prevention and fire fighting services. In this regard, the Office will carry out fire protection surveys when specifically requested to do so by a municipal council. The scope of these surveys includes such matters as fire department organization, fire protection and fire prevention bylaws, fire trucks and equipment, manpower, station locations, communications and water supply. The eventual report submitted to a council is usually a confidential document and the council is under no formal obligation to implement the recommendations since the Fire Marshal has no direct authority over municipal fire departments. At least two surveys of Hamilton-Wentworth departments were carried out prior to regionalization, including Dundas in 1968 and the Town of Stoney Creek in 1967. Most of the recommendations made in these two surveys were implemented by the councils concerned.

As is the case in other regions and counties, Section 133 of The Regional Municipality of Hamilton-Wentworth Act provides for the position of Regional Fire Coordinator. This official, who is appointed by regional council, is responsible "for the establishment of an emergency fire service program and plan for the regional area". The position is currently held by the fire chief of the City of Hamilton.

#### Organization of Fire Departments

All fire departments in the Region are now established by bylaw. It should be pointed out, however, that the Township



of Flamborough only recently provided a legal basis for its five fire departments (a bylaw was passed in October, 1977). Such bylaws are important in that they specify the responsibilities of the chief, deputy chief and other departmental officers; delineate the chain of command; state minimum standards for such activities as training and fire prevention; and establish a reporting relationship between the fire department and the elected council.

With respect to the reporting relationships between local fire departments and councils, the fire chiefs in every municipality except Ancaster report to a specific council committee. These council committees are identified in Table 14. In the case of Ancaster, the chief reports directly to council which employs a committee-of-the-whole system. One matter which should be noted here is that full-time chiefs have the status of a department head and are, therefore, part of the senior management team of the municipality. Volunteer chiefs are usually neither full-time employees of the municipality nor are they considered to be part of the senior management team. This situation may create problems with regard to the coordination of fire protection services with other municipal functions such as building inspection and planning.

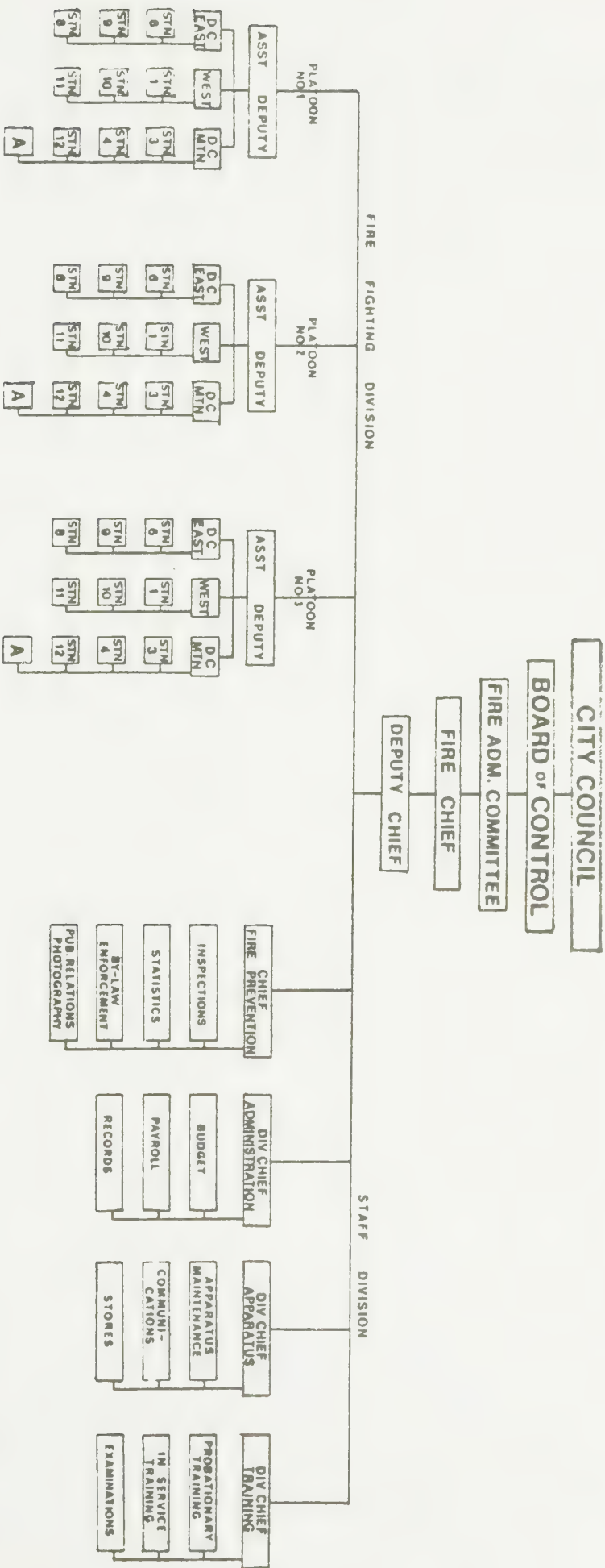
The internal organization of the eleven departments within the Region reflects both their size and nature, particularly whether they are a full-time, composite or volunteer department. On the one hand, there is the full-time force in the City of Hamilton. Its organization exhibits the complexity, specialization and line-staff distinctions which one expects to find in a large urban fire department. (see Chart 1) On the other hand, there are the completely volunteer departments in which one typically finds a chief, deputy chief, captains and lieutenants. The distinction between line and staff activities for volunteer officers is not a very real one. In between these two extremes fall the composite departments of Stoney Creek, Dundas and Ancaster. These departments have an officer structure similar to that of the volunteer units. However, staff functions such as training and the line activity of fire prevention are both more formalized and specialized.

#### Fire Protection Activities and Levels of Service

Earlier in this report it was suggested that fire protection essentially involves fire fighting and fire prevention. Subsumed under the first function are a number of activities which do not involve the actual extinguishing of fires. Fire fighters are also involved in emergency and rescue work with respect to vehicular accidents and natural disasters; inhalator calls; and the clean up of spills of flammable liquids. Therefore, we can look at what fire fighters do in terms of three basic categories, namely fighting fires which occur, preventing fires from occurring and non-fire calls.



CHART 1



HAMILTON FIRE DEPARTMENT - ORGANIZATION





One index of the general level of fire protection activity in the Region is the total number of alarms received by the various fire departments. Table 15 indicates the total alarms in the Region for the years 1968, 1972, 1975, 1976 and 1977. As this table shows, in general there has been a significant increase in the number of alarms over this ten-year period. This is particularly true of Stoney Creek, where alarms have almost doubled. The exception is Ancaster. Alarm statistics, of course, must be qualified in light of at least two other considerations, namely population growth in a particular municipality and the nature of the calls received (i.e., fire versus non-fire calls).

Table 16 relates alarms to population growth in order to provide another perspective on the increase in fire protection activity in the Region between the years 1968 and 1976. For example, Ancaster's total alarms have remained more or less constant during this period but, since its population has actually decreased, alarms per 1000 population have risen by 13%. In all other municipalities, population increased between 1968 and 1976 and, with the exception of Flamborough, the increase in total alarms greatly exceeded the rate of population increase. It is evident from this table that significant increases in fire protection activity occurred in Dundas, Glanbrook, Hamilton and Stoney Creek. By far the largest increase occurred in Stoney Creek where total alarms per 1000 population increased 66% during the nine-year period. The increase in alarms in Dundas, Glanbrook and Stoney Creek exceeded the regional average for the period while the increases in Ancaster, Flamborough and Hamilton were below the average. In the cases of Dundas and Stoney Creek significant increases in the general level of fire protection activity are not surprising given that the population of these two municipalities increased significantly during the period examined. One might be tempted to conclude that population growth has a "multiplier effect" on the number of alarms received by a municipal fire department. However, this observation must be tempered by the fact that both Hamilton and Glanbrook experienced comparative increases in general activity at a rate of population growth well below that of Dundas and Stoney Creek. Given this variation in the data greater insight into the changing nature of fire protection in Hamilton-Wentworth might be gained by focussing on the type of call to which fire departments were responding.

In terms of the nature of the alarms received, Tables 17 and 18 illustrate several interesting trends. When fire protection activity is examined in terms of the distribution of alarms between fire and non-fire calls (Table 17), it is evident that fire calls as a percentage of total alarms decreased in every municipality during the period 1968 to 1976. This downward trend in the number of fire calls is most pronounced in Ancaster and Glanbrook but marginal in Stoney Creek. Also, it would appear by looking at the 1977 data that during the first ten months of that year this downward trend is continuing. The data in Table 18





TABLE 15 TOTAL ALARMS IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1968	1972	1975	1976	1977 (Oct. 31)
Ancaster	139	150	144	148	134
Dundas	249	333	360	383	301
Flamborough	241 <sup>1</sup>	200 <sup>1</sup>	330 <sup>1</sup>	272	293 <sup>1</sup>
Glanbrook	75	74	97	102	114
Hamilton	3949	3892	5038	5124	4245
Stoney Creek	252	318	384	488	437
REGIONAL TOTAL	4905	4967	6353	6517	5524

1 Waterdown figures are estimates.

Source: Information for this table was supplied by the fire chiefs of the area municipalities.



TABLE 16 FIRE ALARMS PER 1000 POPULATION IN THE HAMILTON-WENTWORTH REGION  
BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1968	1972	1975	1976	% Change, 1968-1976	% Change in Population, 1968-1976
Ancaster	9.2	10.0	10.0	10.4	13.0	-6.6
Dundas	15.7	19.2	18.6	19.9	26.8	20.9
Flamborough	11.1	8.7	14.4	11.6	4.5	7.2
Glanbrook	7.9	7.4	9.6	10.2	29.1	6.5
Hamilton	13.4	12.8	16.2	16.4	22.4	6.4
Stoney Creek	9.7	11.5	12.8	16.1	66.0	17.4
REGIONAL AVERAGE	12.8	12.5	15.6	15.9	24.2	7.3

Sources: Data on alarms supplied by fire chiefs of area municipalities. Population data obtained from the Regional Municipality of Hamilton-Wentworth, Planning and Development Department.



TABLE 17      PERCENTAGE BREAKDOWN OF TOTAL FIRE CALLS IN HAMILTON-WENTWORTH BY  
AREA MUNICIPALITY FOR SELECTED YEARS

Municipality	1968		1972		1975		1976		1977	
	Fire	Non-Fire	Fire	Non-Fire	Fire	Non-Fire	Fire	Non-Fire	Fire	Non-Fire
Ancaster	44.6	55.4	29.3	70.7	22.9	77.1	21.6	78.4	7.5	92.5
Dundas	25.7	74.3	17.1	82.9	14.7	85.3	18.5	81.5	11.3	88.7
Flamborough	18.7	81.3	41.8	58.2	15.8	84.2	11.9	88.1	8.1	91.9
Glanbrook	40.0	60.0	59.5	40.5	26.8	73.2	23.5	76.5	9.6	90.4
Hamilton	23.4	76.6	23.2	76.8	21.0	79.0	19.3	80.7	17.4	82.6
Stoney Creek	20.6	79.4	33.6	66.4	21.4	78.6	19.7	80.3	11.9	88.1
REGIONAL TOTAL	31.5	68.5	32.7	67.3	25.7	74.3	23.5	76.5	15.7	84.3

Source: Information provided by area municipal fire chiefs.



TABLE 18 TOTAL CALLS, FIRE AND NON-FIRE, IN HAMILTON-WENTWORTH REGION BY AREA MUNICIPALITY FOR SELECTED YEARS

Municipality	1968		1972		1975		1976		1977	
	Fire	Non-Fire	Fire	Non-Fire	Fire	Non-Fire	Fire	Non-Fire	Fire	Non-Fire
Ancaster	62	77	44	106	33	111	32	116	10	124
Dundas	64	185	57	244	53	307	71	312	34	267
Flamborough	38	203	59	141	45	285	29	243	22	271
Glanbrook	30	45	44	30	26	71	24	78	11	103
Hamilton	925	3004	906	2986	1060	3978	989	4135	737	3508
Stoney Creek	52	200	107	211	82	302	96	392	52	385
REGIONAL TOTAL	1171	3714	1217	3718	1299	5054	1241	5276	866	4658

Source: Information provided by area municipal fire chiefs.





generally supports the observations derived from Table 17 but also provides a basis for making some additional comments about trends in fire protection. For example, in 1976 the Ancaster department was handling approximately one-half of the fire calls it handled in 1968 while in Stoney Creek the number of fire calls had almost doubled over the same period. Also, the absolute number of fire calls increased moderately for both Hamilton and Dundas. Despite these secondary trends one observation which is clearly illustrated by Tables 17 and 18 is that the incidence of non-fire calls, both in relative and absolute terms, has increased dramatically. Stated simply, firemen in the Region are still performing the vital function of fighting fires but an increasing proportion of their workload is being consumed by non-fire activities such as rescue work and inhalator calls. It is also interesting to note that just under one quarter of the alarms received by the Hamilton Fire Department in 1976 were either unnecessary calls, accidental alarms or false alarms.

The second major component of fire protection is fire prevention. Fire prevention activities include the routine inspection of industrial, commercial, residential and institutional properties; pre-planning work; the inspection of building plans; and public education.

Table 19 illustrates the wide variation in the level of fire prevention activity carried out by the eleven departments in the Region. As one might expect, the level of fire prevention activity varies directly with the size and resources of the department concerned - i.e. large full-time departments such as Hamilton's have the staff and resources to carry out a much more extensive program than is possible in completely volunteer departments such as those in Flamborough and Glanbrook. The Fire Prevention Bureau of the Hamilton Fire Department consists of 13 full-time personnel and the department's program includes a complete range of fire prevention activities including a home inspection program. The only other departments in the Region which have a mandatory home inspection program are Dundas and Stoney Creek. In Dundas, the chief, deputy chief and two fire fighters are responsible for fire prevention work. The department attempts to inspect commercial, industrial and institutional premises at least once a year. In-service home inspections are carried out by full-time fire fighters during the day shift only. Since 1976, Stoney Creek has used its relatively large force of volunteers to carry out home inspections. Prior to that time, full-time men carried out home inspections on a request basis only. At present, full-time personnel attempt to inspect all commercial and industrial facilities at least once a year. Schools and most institutions are done three times per year and high-rise buildings are done more often. The department's fire protection activities also involve pre-planning or the gathering of information on a building's layout and fire fighting equipment. Fire prevention work in



TABLE 19 FIRE PREVENTION SERVICES OF MUNICIPAL FIRE DEPARTMENTS IN THE HAMILTON-WENTWORTH REGION, 1977

Municipality	Chief F.T. Vol.	Fire Prevention Officers F.T. Vol.	Home Inspection Program*	Home Inspections Conducted (Oct. 31)	Commercial/Industrial/ Institutional Inspection Program*	Inspections Conducted (Oct. 31)
Ancaster	1	1	No	N.A.	Yes	38
Dundas	1	3	Yes	1,816	Yes	309
Flamborough:						
a. Freeleton	1	5	No	N.A.	No	N.A.
b. Greensville	1	5	No	N.A.	Yes	N.A.
c. Lynden	1	2	No	N.A.	No	4
d. Rockton	1	1	No	N.A.	No	N.A.
e. Waterdown	1	1	No	N.A.	No	N.A.
Glanbrook:						
a. Binbrook	1		No	N.A.	No	9
b. Mt. Hope	1	5	No	N.A.	Yes	30
Hamilton	1	13	Yes	22,583	Yes	12,433
Stoney Creek	1	6	Yes	1,093	Yes	339
REGIONAL TOTAL	4	7	-	25,492	-	13,162

\*Fire departments without formal inspection programs usually inspect schools and churches on a yearly basis and other premises on a request basis only.

Source: Information supplied by area municipal fire chiefs.



Ancaster appears to be primarily the responsibility of the chief and deputy chief. The low profile of this department's program is due to the absence of sufficient manpower. Ancaster's full-time complement is about the same as that of Stoney Creek, but its volunteer component is much smaller. Also, the Ancaster department operates an ambulance service for the Ontario Ministry of Health and each call involves two men being away from the station. During the first six months of 1977 the department responded to an average of 2.5 ambulance calls per day. Given these manpower constraints, a mandatory home inspection program is not carried out in Ancaster even though such a program was attempted several years ago and later abandoned. Inspection of commercial, industrial and institutional properties, pre-planning and public education activities all take place but not to the extent that may be necessary or desirable given both existing and proposed development in the municipality.

The level of fire prevention activity in the volunteer fire departments is relatively low, as might be expected given the absence of full-time fire fighters. The fire departments in both Flamborough and Glanbrook usually inspect schools and churches on a yearly basis. However, all other premises are normally inspected on a request basis only. The departments in Greensville and Mt. Hope have made some attempt to inspect commercial and industrial properties on a periodic basis. In most volunteer departments, fire prevention tends to be the responsibility of the chief, deputy chief and other volunteer officers.

Related to the general function of fire prevention is the existence of municipal fire prevention bylaws as well as the organizational relationships which exist between fire protection, building inspection and land use planning services. Under the Ontario Building Code, a municipality has permissive power to appoint a fire chief as the assistant building commissioner. This approach to the legal dimension of fire prevention activities is one which is endorsed by the Ontario Fire Chiefs' Association. Two area municipalities in the Region have adopted this approach, namely Dundas and Ancaster. In September 1977, Ancaster council passed a bylaw designating the chief of the fire department as the assistant building commissioner. Under this bylaw, the chief may exercise all the powers and duties of an inspector under The Building Code Act with respect to the enforcement of certain provisions of the code pertaining to fire prevention. More specifically, a building permit for a dwelling other than a single family dwelling cannot be issued until the fire chief has approved the plans in relation to the following matters:

1. fire alarm and detection systems,
2. water supplies,
3. fire vehicle access,
4. fire extinguishers and extinguishing systems,
5. standpipe and hose systems,





6. sprinkler systems,
7. elevators for use by fire fighters,
8. emergency lighting,
9. flame spread ratings, and
10. fire exit signs and fire escapes.

In Dundas, the chief, deputy chief and designated fire prevention officers have been given similar responsibilities under the Act.

Hamilton's fire prevention standards are incorporated as part of the city's building bylaw. This bylaw defines the powers and duties of the chief fire prevention officer which, of course, are exercised under the general supervision and control of the Hamilton fire chief. In Stoney Creek, which has a bylaw, an effective working relationship exists between the fire chief and the Director of Building but the chief has not been appointed the assistant building director. Also, on occasion, the fire department has run courses on fire prevention for the town's building inspectors.

The situation in the Townships of Flamborough and Glanbrook appears to be quite different from that which exists in the other municipalities. Liaison between the fire chiefs and building inspection officials tends to be infrequent and ad hoc rather than routine. In most instances, volunteer chiefs receive plans for any major development but an ongoing and formal relationship between these two areas of municipal activity is not in place. This situation may be related to a point made earlier, namely that the volunteer chiefs do not have the status of department head (or even that of a full-time municipal employee) and hence their relationships with other municipal employees, particularly department heads, are somewhat more tenuous and at best informal. Such is certainly not the case in the other four municipalities where all fire chiefs are full-time municipal officials.

Another aspect of fire prevention which deserves some mention is the existence of fire access route bylaws for commercial, industrial and multi-unit residential properties. Ancaster, Stoney Creek and Hamilton are the only municipalities in the Region which have and probably need such a bylaw. Fire access bylaws are enforced by the regional police force.

In order to perform the related activities of fire fighting and fire prevention, municipal fire personnel, whether they are full-time or volunteer, must be well trained. Once again, the amount and type of training received by fire fighters in the Region very much depends upon the size of the department in which they work. In a large full-time department such as Hamilton's, training is continuous and quite intensive. Hamilton's Training Division consists of a division chief and two lieutenants or instructors, and the department's fire fighters undergo two hours of training daily. The instructors have, on average, 12 years' experience





as fire fighters and are also graduates of the Ontario Fire College. The department is currently using a training facility located at the extreme north end of Ferguson Avenue.\* However, a new training complex has been approved and it will be located adjacent to the site of a proposed new station at Stone Church Road and Upper Ottawa Street. This facility will be completed some time in 1978. The Hamilton chief in his capacity as Regional Fire Coordinator has proposed that this complex become a regional training facility. However, this proposal was rejected by the other fire chiefs in the Region and at present there are no arrangements for sharing the new training facility.

Training in both the composite and volunteer fire departments does not approach the norms set by Hamilton. The Ancaster Fire Department holds two-hour training sessions every Wednesday night for all its personnel and its average turnout for the current year is approximately 19 men per session. The deputy chief of the department is primarily responsible for the training function. In Dundas, training sessions are held every other Monday for two hours. However, it should be noted that attendance at training sessions in the Dundas department is not compulsory. The department's average attendance at the 21 sessions held in 1976 was approximately 17 men out of a total force of 36 (16 full-time, 20 volunteers). Full-time fire fighters in Dundas are paid overtime rates when they attend practice sessions. The training function is the responsibility of the deputy chief who is a graduate of the Ontario Fire College. The Stoney Creek department has training sessions every Thursday for two hours. Both full-time and volunteer fire fighters must attend these sessions and they are not allowed to miss more than three sessions in a row. Average attendance at these sessions during 1976 was as follows: Station #1 - 80%; Station #2 - 77%; and Station #3 - 87%. The training officer in each station is the district chief who is a volunteer fire fighter. Also, four of the department's full-time personnel have completed the Fire Protection Technology Course offered at the Ontario Fire College.

In the volunteer departments, training sessions of two hours' duration are the norm and they are usually on Mondays. In Binbrook and Mt. Hope, training is the joint responsibility of the deputy chief and the other officers. Greensville divides its force of 28 volunteers into two platoons. Each platoon receives two to three hours of practice every other Monday and the average turnout for these sessions during 1977 was 10 to 12 men. Volunteers in the Lynden Fire Department train for two hours a week and one night a month is used for clean up. Rockton volunteers train every second Tuesday for one to two hours. In Waterdown, two-hour training sessions are held every Monday night and the average attendance during the past year was 10 to 14 men. Freelon's volunteers train for two hours each week.

\* Plus a new training tower facility added in December, 1977.



## Inter-Municipal Fire Protection Agreements

The most significant inter-municipal agreement among the fire departments in the Region is the mutual aid system. All departments participate in this system and each municipal council has formally ratified this participation by bylaw. The mutual aid arrangement, which has been encouraged by the Office of the Fire Marshal, is a reciprocal agreement among departments whereby all departments have agreed to assist each other with additional men and equipment in those situations that cannot be handled effectively by a single department. The mechanics of this system in Hamilton-Wentworth have been developed by the Regional Fire Coordinator in conjunction with the other area municipal chiefs. The specific procedures are set out in a set of running assignment sheets. These sheets indicate which departments will respond to a request for assistance by a specific municipal department in terms of a first, second and third help call basis. For example, the Stoney Creek department would receive first help call assistance from either Hamilton or Binbrook. It should be noted that the department requiring mutual aid assistance must specifically request this assistance and its chief remains in command at the fire scene even over the assisting units. Also, a municipality must have committed 90% of its men and equipment in a particular situation before it can request help under mutual aid from another municipality.

The total number of mutual aid calls in Hamilton-Wentworth is fairly low in relation to both total alarms and total fire calls. Table 20 lists the total number of mutual aid calls in the Region for the years 1968, 1972, 1975, 1976 and 1977. It was prepared on the basis of the best information available but this was hardly of consistently high quality. For example, the table does not indicate whether the department concerned either received or provided assistance. In addition, most of the departments in Flamborough still regard assistance to another department within the municipality as a mutual aid call, at least for statistical purposes. Also, in some cases formal records of whether assistance was received or given under mutual aid are not kept. However, it may be that the gaps in the departmental record concerning mutual aid calls reflect the viewpoint expressed by every chief in the Region, namely that no one municipality is receiving substantial benefits under the mutual aid system at the expense of other municipalities. Indeed, all of the local chiefs stated that the system is working quite well and should continue in its present form.

In addition to the mutual aid system, the Regional Fire Coordinator has proposed the setting up of an emergency fire service program. This proposal emanates directly from the coordinator's responsibility as defined in section 133 of the Regional Act. However, to date such a plan has not been adopted by the area municipalities. Under the proposed emergency fire service plan, which in many ways is very similar to the mutual aid scheme, the Regional Fire Coordinator would



TABLE 20 MUTUAL AID CALLS IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1968	1972	1975	1976	1977 (Oct. 31)
Ancaster	1	2	1	3	1
Dundas	1	3	0	3	2
Flamborough:					
a. Freelon	1	1	9	2	3
b. Greensville	3	7	2	5	2
c. Lynden	N.A.	N.A.	N.A.	1	N.A.
d. Rockton	N.A.	N.A.	3	4	5
e. Waterdown	N.A.	N.A.	0	1	2
Glanbrook:					
a. Binbrook	2	2	4	4	1
b. Mt. Hope	3	3	2	2	3
Hamilton	N.A.	2	1	0	1
Stoney Creek	0	0	1	1	0
REGIONAL TOTAL	11	20	23	26	20

Source: Information provided by area municipal fire chiefs.





assume overall direction and control of regional fire fighting resources during peace-time emergencies. Therefore, in contrast to the mutual aid scheme where the municipal chief remains in command, under the emergency fire service plan the Fire Coordinator would assume command. This change in the chain of command has met much opposition from the suburban and rural chiefs in the Region. Also, the perception exists that mutual aid is sufficient to handle any peace-time emergencies and therefore another plan is unnecessary.

Many departments in the Region have what are described as "verbal" agreements with adjoining municipalities. These agreements are struck informally in order to cover certain border areas that can best be covered by one department or another. The striking of verbal agreements and the running of municipal boundaries to fight fires in another municipality goes against the provisions of most local bylaws which establish fire departments, and it is an operational procedure which is not encouraged by the Fire Marshal. The resolution of this problem appears to be beyond the capacities of individual municipal councils and their fire departments, since there is no mechanism, not even the Office of the Fire Marshal, to look at the need for inter-municipal agreements.

Outside of mutual aid, very few formal inter-municipal fire agreements exist among the municipalities in the Region. As stated earlier, Ancaster contracts with the Lynden Fire Department to cover a portion of its territory which is primarily rural. This agreement between Ancaster and Flamborough is established by bylaw. Stoney Creek is involved in a mutual aid agreement with Grimsby in the Niagara Region.

## Fire Protection Resources

### Manpower and Deployment

There are 468 full-time and 283 volunteer fire fighters in Hamilton-Wentworth (Table 21). The current level of manpower for both full-time and volunteer personnel represents a modest expansion from the level which existed in 1968. The increase in full-time manpower has been evenly distributed between the Hamilton Fire Department and the three composite departments. Most of the increase in volunteer strength has occurred in the five Flamborough departments. As stated previously, the Hamilton Fire Department accounts for the largest percentage of the full-time personnel in the Region. Volunteer fire fighters are still a very important component of the three composite departments, particularly in Ancaster and Stoney Creek.

The remuneration of volunteer fire fighters varies from department to department. In Ancaster, volunteers are paid \$5.72 per hour to fight fires and to attend training sessions. Also, volunteers who are designated for ambulance





TABLE 21  
NUMBER OF FIRE FIGHTERS IN THE HAMILTON-WENTWORTH REGION BY  
MUNICIPALITY FOR SELECTED YEARS

Municipality	1968		1972		1975		1976		1977	
	F.T.	Vol.	F.T.	Vol.	F.T.	Vol.	F.T.	Vol.	F.T.	Vol.
Ancaster	5	18	5	18	8	15	8	16	8	16
Dundas	8	21	14	22	15	18	16	20	16	20
Flamborough:		98		105		110		121		123
a. Freeleton		<u>30</u>		<u>30</u>		<u>27</u>		<u>30</u>		<u>30</u>
b. Greensville		21		23		26		27		28
c. Lynden		15		15		19		21		21
d. Rockton		14		14		18		20		20
e. Waterdown		18		23		20		23		24
Glanbrook:		42		43		46		49		49
a. Binbrook		<u>19</u>		<u>20</u>		<u>22</u>		<u>24</u>		<u>24</u>
b. Mt. Hope		23		23		24		25		25
Hamilton	418		418		425		437		437	
Stoney Creek	1	70	5	70	5	70	5	75	7	75
REGIONAL TOTAL	432	249	442	258	453	259	466	281	468	283

Source: Fire chiefs of the area municipalities.



duty earn \$1.14 per hour on standby plus approximately \$5.00 per ambulance call. Dundas volunteers are paid at the rate of \$6.00 for the first hour and \$4.00 for each hour or part thereof after the first hour for both alarms and practices. The rate of pay for volunteers in the Binbrook Fire Department is \$5.00 per practice session and \$5.00 for the first hour plus \$2.50 for each succeeding hour to fight fires. In addition, the chief receives an annual stipend of \$300, the deputy chief \$100, and captains \$75. The approach used in Flamborough involves the payment of a \$1,000 stipend to the chief and a lump sum payment of \$7,500 per annum to each department which is then distributed to the volunteers according to a variety of schemes (for example, Waterdown uses a point system to reimburse volunteers for their activities with the department). The payment of a lump sum to each station is also used in Stoney Creek. Outside of the \$5.00 per hour received for carrying out home inspections and the \$20 bonus at Christmas time, Stoney Creek volunteers receive \$7,500 per annum per station which is divided according to the procedures specified in an internal constitution. It is readily apparent that volunteer fire fighters in the Region receive little in the way of monetary compensation for their participation in fire protection activities.

Table 22 indicates the general deployment of fire fighters by municipality and by station. The Ancaster station is manned on a 24-hour basis with 10-hour day shifts and 14-hour night shifts seven days per week. Day shift strength on weekdays is four full-time men in the station augmented by three off-duty full-time staff subject to recall, as well as on average three volunteers. Of Ancaster's volunteer component of 16 men, 10 work days in Hamilton, one works shift work in Hamilton, and five work in Ancaster, although two of them have occupations which on any given day may take them beyond the municipality's boundaries. Also, it should be noted that an ambulance call during the day shift on a weekday would take two full-time men away from the station. Finally, the weeknight and weekend shifts involve one full-time man on duty in the station.

The Dundas Fire Department is also manned on a 24-hour basis. All personnel work a total of 40 hours per week. The fire chief and two fire prevention officers work straight days (eight-hour shifts) while the deputy chief works both day and afternoon shifts and the other 12 firefighters work three eight-hour shifts organized into four three-man platoons.

Full-time fire fighters in Stoney Creek work a day shift at Station #1 on Lake Avenue (i.e., from 8:30 a.m. to 4:30 p.m., Monday through Friday); however, full-time fire fighters in this municipality are still considered as volunteers not only for departmental social activities but also in terms of being on call during their off hours. Stoney Creek volunteers all live within a certain radius of the station to which they are attached and many of them are on shift work either in Hamilton or in Stoney Creek.



The Hamilton Fire Department divides its fire fighting personnel into three platoons each headed by an assistant deputy chief. The city is divided into three districts (west, east and mountain) and each platoon works an eight-hour tour of duty. Fire fighting personnel assigned to the Mount Hope Airport are on duty between the hours of 7:00 a.m. and 11:00 p.m. On the night shift (i.e., from 12:00 p.m. to 8:00 a.m.) they report to Station #12 or another designated station.

In the rural townships of Flamborough and Glanbrook, volunteers are available on a 24-hour call basis. Their availability is practically limited by the type of occupation that the volunteer has and the hours which he works. Very few of Binbrook's fire fighters work in the area and therefore only shift workers are taken. Mt. Hope's fire fighting force of 25 volunteers includes 11 shift workers and 14 day workers. All personnel report to the fire station with the exception of four who respond directly to the fire call. The availability of Flamborough volunteers during weekdays is also variable. In Lynden, nine of the 21 members of the department work in the village including the chief. The Waterdown department has six men who work in the village. Freelon faces the problem of a very dispersed population and the absence of a central business district of any kind. Approximately 80% of Greensville's fire fighters live near the station. Rockton states that an average of eight to ten men are available per shift.

Although fire station sirens are still used in most instances to alert volunteers, they are not relied on very much any more. All volunteers have radio receivers in their homes and increasing use is being made of portable radios. For example, all members of the Ancaster Fire Department now have portable radios while many of the departments in Glanbrook and Flamborough have budgeted for the purchase of additional devices.

### Facilities and Equipment

At present there are 22 fire stations in Hamilton-Wentworth and Map 2 indicates the location of these existing facilities as well as the location of several proposed facilities. Just under half of the existing fire stations are located in the City of Hamilton.

Many of the proposed fire stations depend very much on the nature of development which will take place in the next 10 to 15 years. Discussion has taken place in both Ancaster and Dundas regarding the need for an additional station in each of those municipalities. Dundas has earmarked some funds in its projected capital budget for the construction of a sub-station in the western part of the municipality along Highway 99. This facility, which has a tentative completion date of 1980, would service the proposed residential development in that area. The situation in



TABLE 22                      DEPLOYMENT OF FIRE FIGHTERS BY  
MUNICIPALITY AND BY STATION, 1977

Municipality	Station	Officers		Fire Fighters	
		F.T.	Vol.	F.T.	Vol.
Ancaster		3		5	16
Dundas		4		12	20
Flamborough:					
a. Freelon			5		25
b. Greenville			6		22
c. Lynden			4		17
d. Rockton			4		16
e. Waterdown			6		19
Glanbrook:					
a. Binbrook			5		19
b. Mt. Hope			6		19
Hamilton	#1	18		87	
	#11	6		24	
	#10	6		30	
	#9	15		42	
	#6	12		42	
	#8	6		30	
	#12	12		42	
	#3	3		18	
	#4	3		18	
	Mt. Hope <sup>1</sup>	1		2	
Stoney Creek	#1	1	5 <sup>2</sup>	6	24
	#2		4		24
	#3		4		28

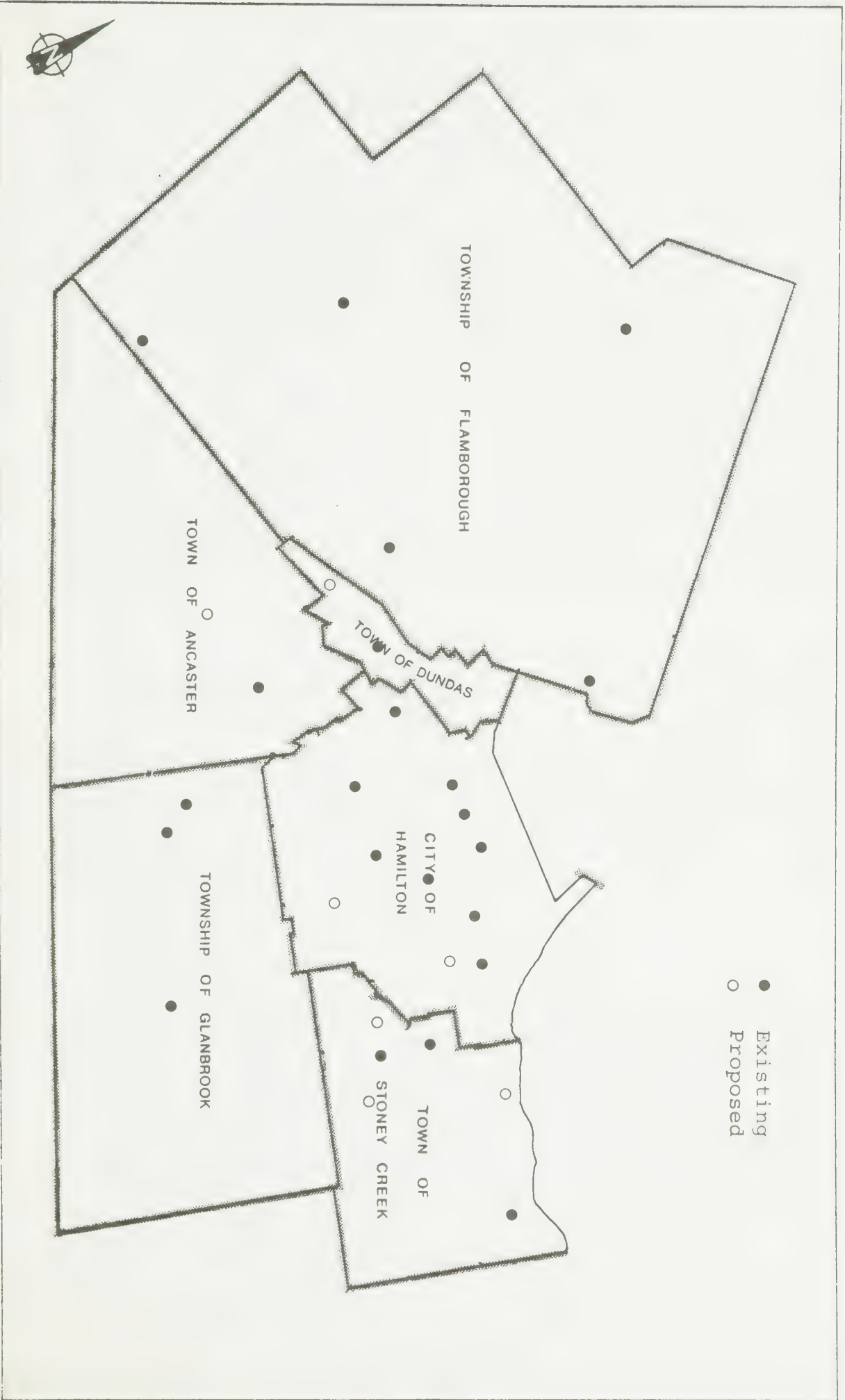
1 Mt. Hope fire fighters on duty from 0700 - 2300. Based in Station #12 during all other times.

2 Paid fire fighters serve as volunteer officers after hours.

Source: Information supplied by area municipal fire chiefs.









Ancaster is much more tentative and the need for a new facility is contingent upon the development of industrial activities near the juncture of Highway 403 and Wilson Street West. Both development schemes are recognized in the Region's planning projections for these municipalities. Hamilton has just opened a new fire station at the corner of Mohawk Road West and Garth Street and this station will replace the present Station #3. Also, as previously mentioned, the department has approval for a new station at Stone Church Road and Upper Ottawa Street. Tentative plans are also being made concerning a station to serve the southeast portion of the city below the escarpment with a tentative completion date of 1981. Significant expansion of fire stations will take place in Stoney Creek over the next four to five years. New facilities are proposed on Mud Street and Isaac Brock Street in the west mountain area; the east-central mountain area in the vicinity of Tapley Town (at which time the station at Mud Street and Highway 20 would be closed); and a station in the Fruitland Road-Barton Street area. The latter would then become the main fire station with administration and training facilities. At the present time, neither Flamborough nor Glanbrook is proposing to build any new fire stations although there is some possibility that Rockton's existing facility will be replaced in the near future. A new station was built in Lynden in 1977.

The deployment of equipment at the various fire stations within the Region is shown in Table 23. The nature of fire protection services required in the six area municipalities is aptly illustrated by the different equipment available in each station. For example, the rural departments depend primarily upon tankers and pumpers since in most cases they must bring their source of water with them. The departments in Hamilton, Dundas and Stoney Creek can rely on hydrants for water supply and therefore employ pumpers as well as aerial trucks. All departments have an emergency vehicle, a fact which illustrates the extent to which fire departments are now involved in this type of operation.

### Response Time

Effective fire fighting is partly dependent upon the ability of a department to dispatch men and equipment to a fire as quickly as possible. Response time, therefore, is an important indicator of both a department's efficiency and effectiveness. However, like many of the indicators that are used to measure the efficiency and effectiveness of fire protection services, response time has certain limitations. A number of interrelated factors must be considered in using response time as an indicator of a department's efficiency and effectiveness:

1. the distance to be travelled;
2. the availability of full-time versus volunteer fire fighters;



TABLE 23 LOCATION OF FIRE HALLS AND DEPLOYMENT OF EQUIPMENT IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY, 1977

Municipality	Location of Fire Hall	Available Equipment					
		Pumper	Aerial	Tanker	Emergency	Car	Other
Ancaster	336 Wilson St. East	2		1	1 <sup>1</sup>	1	
Dundas	Memorial Square	3	1	1	1	1	
Flamborough:							
a. Freelon	Lot 6, Con. 9, W.F. Brock Rd.	1		1	1		
b. Greenville	Lot 9, Con. 2, W.F. Brock Rd.	2		1	1		
c. Lynden	Lot 12, Con. 1 (Beverly)	1		1	1		
d. Rockton	Lot 21, Con. 4 (Beverly)	1		1	1		
e. Waterdown	Barton Street	2		1	1		
Glanbrook:							
a. Binbrook	Hwy. 56, Binbrook	1		2	1		
b. Mt. Hope	Airport Rd. West	1		2	1		
Hamilton:		12	6	2	10	2	4
a. Station #1	35-43 John St. North						
b. Station #3	647 Upper James St. <sup>2</sup>						
c. Station #4	930 Queensdale Ave.						
d. Station #6	165-171 Sandford Ave. North						
e. Station #8	400 Melvin Ave.						
f. Station #9	125 Kenilworth Ave. North						
g. Station #10	1455 Main St. West						
h. Station #11	24 Ray St. South						
i. Station #12	779 Upper Wentworth St.						
j. Mt. Hope	Hamilton Civic Airport						
Stoney Creek:							
a. Station #1	13 Lake Ave.	2	1		1	1	
b. Station #2	Hwy. 8 (Winona)	1 <sup>3</sup>			1		1
c. Station #3	13 Mud St. East	2			1		
REGIONAL TOTAL		31	8	13	22	5	5

1 Ambulance equipped to Ontario Ministry of Health standards.

2 This station will be closed upon the completion and opening of a new station at Garth St. and Mohawk Rd. West.

3 1500 gallon 250 G.P.M. water tanker on order to be stationed in Station #2. 500 G.P.M. pumper to be transferred from Station #3 to Station #2 to replace utility van.

Source: Information provided by area municipal fire chiefs.



3. the number of men that respond to a call;
4. the condition of the road network over which fire vehicles must travel;
5. the type of apparatus which is dispatched; and
6. the types of fires which occur and their incidence.

With these limitations in mind, information has been gathered concerning the response times of the various municipal fire departments in Hamilton-Wentworth. Table 24 illustrates the maximum response distances for various pieces of fire fighting equipment deployed by the Hamilton Fire Department. Table 25 shows response times for the suburban and rural departments in terms of the maximum distance which any department would have to travel to respond to an alarm as well as the average number of men responding to all calls. In terms of the maximum distance to fire site, some of the departments in Flamborough and Glanbrook exceed the five mile norm accepted as sufficient for effective fire protection by the insurance industry. However, in making this observation one must decide whether the incidence of alarms in the outermost portions of the fire district served by these departments justifies the building of additional facilities. Also, protection of fringe areas can often be accomplished through inter-municipal agreements. Both Dundas and Stoney Creek are within the five mile criterion. In fact, upon the completion of the three proposed stations in Stoney Creek, the maximum distance to fire site for any of the five stations will be three miles. The calculation for Ancaster does not include the part of that municipality protected by the Lynden Fire Department. Without this agreement the maximum distance to fire site for the Ancaster department would be  $13\frac{1}{2}$  miles.

The average number of men responding to all calls for volunteer departments varies from 6 to 15 while the average number of men for composite departments varies from 10 to 15. Average response time for all calls for volunteer departments ranges between 6 and 8 minutes and in the case of Stoney Creek, Stations #2 and #3, which are manned completely by volunteers, also fall within this range. However, the average response time for Station #1 which is manned by full-time fire fighters during the day shift is somewhat lower at 4 minutes. There is little doubt that having full-time men available in a station increases the department's ability to respond quickly to an alarm. However, in the case of volunteer departments, it is a moot point whether there is a sufficient level of fire protection activity to justify the utilization of full-time fire fighters. Generally, in areas of high population density an average response time of 2 to 5 minutes is considered to be good while 5 to 7 minutes is acceptable. Given this standard fire departments within the Region appear to be in line with recognized criteria of fire protection effectiveness.





TABLE 24                    MAXIMUM RESPONSE DISTANCES, HAMILTON FIRE DEPARTMENT, 1977

Apparatus	Station	Location of Response	Mileage	Time (min.)
Pumper 1	1	Bay & Aberdeen	3.0	4.5
Pumper 2	1	Burlington & Victoria	2.1	3.5
Pumper 3	3	Mohawk & Upper Horning	3.3	7.5
Pumper 4	4	Mohawk & Mountain Brow	2.5	4.0
Pumper 6	6	Sherman Access & Sherman Cut	2.4	6.5
Pumper 8	8	Greenhill & Summercrest	3.5	6.5
Pumper 9	9	Cochrane & Greenhill	2.3	5.0
Pumper 10	10	Hwy. 403 at Ancaster Line	4.1	7.0
Pumper 11	11	York Blvd. & Burlington Line	3.5	5.0
Emergency 12	12	Hwy. 53 & Trinity Road	5.2	8.0

\*The average response time within the city limits is 3 minutes.

Source:    Hamilton Fire Department.



TABLE 25 MAXIMUM DISTANCE TO FIRE SITE, MAXIMUM RESPONSE TIME, AND AVERAGE RESPONSE TIME FOR SUBURBAN AND RURAL FIRE DEPARTMENTS, 1977

Municipality	Maximum Distance to Fire Site (mi.)	Maximum Response Time <sup>1</sup> (min.)	Average Number of Men Responding to All Calls (Oct. 31)	Average Response Time (Oct.)
Ancaster	7.0	9.4 <sup>2</sup>	12.5 <sup>2</sup>	N.A.
Dundas	5.0	10.2	15.0	3.0
Flamborough:				
a. Freeleton	7.0	11.4	10.0	6.0
b. Greensville	6.2	10.4	10.0	6.0
c. Lynden	8.5	12.2	6.0	6.0
d. Rockton	10.0	14.0	10.0	7.0
e. Waterdown	7.5	11.0	8.0	7.0
Glanbrook:				
a. Binbrook	7.2	11.7	15.0	8.3
b. Mt. Hope	8.5	12.2	9.0	7.0
Stoney Creek:				
a. Station #1	5.0	8.0	12.8	4.0
b. Station #2	5.0	9.0	10.8	7.0
c. Station #3	5.0	9.0	11.5	8.1
1	Response time to maximum distance has been calculated using an average speed of 50 m.p.h. (0.83 mi. 1 minute) plus time required to leave the station as provided by the various fire chiefs.			
2	Maximum response time and number of men responding calculated for day shift only. Calculations for other time periods are 11.4 minutes and 16.3 men.			

Source: Information for this table provided by area municipal fire chiefs.



## Dispatching and Communication Systems

Dispatching is an area of activity in which a fair measure of regional cooperation exists among the various municipal fire departments. The calls for all fire departments (except Dundas) are handled by regional fire control in Hamilton and each municipality contributes towards the cost of operating this centralized service. For purposes of central dispatching, the Region is divided up into a number of districts and zones. Every year the various departments participating in this scheme promote its use by distributing stickers which indicate the central number to be phoned as well as the appropriate district and zone number that the caller should give to the dispatcher. The district and zone numbers are used in every municipality except Ancaster which simply requires the caller to identify the street address. However, given the overlap of street names among municipalities such as Ancaster, Dundas and even Stoney Creek, a caller from Ancaster phoning Hamilton fire control must also be very careful to identify that the call is coming from Ancaster. Virtually all of the chiefs interviewed felt that the central dispatching system was working quite well and that any errors that have occurred were more the result of human error than basic defects in the system itself.

Dundas has chosen to remain outside the central dispatching system primarily because of the "local knowledge" argument. That is to say, the Dundas Fire Department thinks its personnel are better able to identify where a call is coming from than personnel sitting in regional fire control in Hamilton. With the construction of a new central fire department in Dundas in 1972, a central alarm receiving room was set up. Also, the Dundas communication centre includes a district alarm system consisting of 28 direct alarms providing a link with schools, churches, institutions, commercial facilities and apartment buildings. Accordingly, Dundas' average response time for the years 1975 to 1977 was approximately three minutes. Dundas' average response time is certainly well below that of the other two composite departments and comparable to that of the Hamilton department. It is difficult to determine whether this relatively good response time is entirely attributable to the fact that Dundas has its own alarm system. One must also consider the number of fire fighters available to answer calls, the type of call concerned and the kinds of equipment that can be delivered to the fire scene. In addition, it should be noted that Dundas is only 10.6 square miles in area and the maximum distance to fire site is five miles.

## Expenditures on Fire Protection and Fire Losses

Ideally, a municipality attempts to minimize both its fire protection expenditures as well as its fire losses. However, in order to minimize fire losses, it is usually necessary to spend an amount on fire protection greater than the actual dollar value of the losses incurred.



Table 26 shows gross fire protection expenditures by municipality in the Region for the years 1968, 1972, 1975, 1976 and 1977. In all municipalities, fire protection expenditures have increased significantly between 1968 and 1977. The increased cost of operating full-time and composite departments is primarily due to the addition of full-time fire fighting personnel as well as the increased salaries and benefits which they have received over the ten-year period. In 1977 salaries and benefits accounted for 84% of Ancaster's fire protection expenditures and 78% of Dundas' spending. Stoney Creek with its large volunteer component spent only 49% of its fire budget on salaries and benefits. Salaries and benefits accounted for almost 88% of Hamilton's fire expenditures, a proportion which has changed little since 1968 when this expense consumed about 86% of the fire budget.

Increases in expenditures by volunteer departments in Flamborough and Glanbrook are primarily caused by increased spending on capital items such as vehicles or new fire stations. For example, Flamborough's 1975 budget included \$46,000 for a new pumper while the 1976 budget included \$107,000 for a new fire station in Lynden. Seventy per cent of Glanbrook's 1976 budget was consumed by spending on capital items including the renovation of the Binbrook fire station.

Fire protection expenditures by the six area municipalities are examined on a per capita basis in Table 27 and in relation to a municipality's equalized assessment in Table 28. With the exception of Glanbrook, the trend in expenditures per capita is an upward one. In fact the percentage increases in the two time periods examined, namely 1968 to 1972 and 1972 to 1976, are fairly significant for all municipalities. This upward trend is further confirmed by examining fire protection expenditures in relation to a municipality's assessment base as is done in Table 28 for the years 1975, 1976 and 1977.

In order to assess whether or not this increase in spending is having the desired effect one must also examine data on fire losses. This is done in Tables 29, 30 and 31. Table 29 shows that in Ancaster, Flamborough and Glanbrook the number of fires has declined since 1968. The data for Dundas and Hamilton, however, reveals a moderate upward trend. Stoney Creek, as mentioned earlier, has experienced a significant increase in the number of fires. Despite these trends for individual departments, in the Region as a whole approximately 1,200 to 1,300 fires occurred per year between 1968 and 1976. Also, even in those instances where the number of fires has decreased, property losses have still increased perhaps due to inflation more than anything else. Examining fire losses in per capita terms for the 1968 to 1976 period (Table 30), several observations can be made. The first is simply that the data on fire losses exhibits a great deal of fluctuation, particularly in the cases of Dundas and Flamborough. Between 1968 and 1972 fire losses per capita increased significantly in these two municipalities. However, between 1972 and 1976





TABLE 26 FIRE PROTECTION EXPENDITURES IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1968	1972	1975	1976	1977*
Ancaster	\$ 39,347	\$ 110,028	\$ 181,220	\$ 229,434	\$ 240,629
Dundas	95,864	220,819	396,431	409,022	464,894
Flamborough	50,008	61,218	138,521	179,508	302,871
Glanbrook	30,603	23,174	45,719	130,213	57,050
Hamilton	3,644,840 <sup>1</sup>	5,775,460 <sup>1</sup>	8,057,778	9,209,673	9,621,310
Stoney Creek	N.A.	N.A.	238,649	287,763	320,870
REGIONAL TOTAL	3,860,662	6,190,699	9,058,318	10,445,613	11,007,624

\*Budgetary allocations.  
 1 Estimates from budget documents.

Source: Clerks and/or Administrators of the area municipalities.



TABLE 27 FIRE PROTECTION EXPENDITURES PER CAPITA IN THE HAMILTON-WENTWORTH REGION  
BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1968	1972	% Change 1968-1972	1976	% Change 1972-1976	1977	% Change 1976-1977
	\$	\$		\$		\$	
Ancaster	2.59	7.32	182.6	16.18	121.0	17.04	5.3
Dundas	6.03	12.72	110.9	21.29	67.4	24.05	13.0
Flamborough	2.29	2.68	17.0	7.68	186.6	12.69	65.2
Clanbrook	3.24	2.31	-28.7	12.96	461.0	5.68	-56.2
Hamilton	12.42 <sup>1</sup>	18.97 <sup>1</sup>	52.7	29.50	55.5	30.85	4.6
Stoney Creek	N.A.	N.A.	N.A.	9.48	N.A.	10.00	5.5
REGIONAL AVERAGE	10.85 <sup>2</sup>	16.75 <sup>2</sup>	54.4 <sup>2</sup>	25.52	52.4	26.76	4.8

1 Calculation based on budgetary estimates.

2 Figures exclude Stoney Creek (i.e. Town of Stoney Creek and Saltfleet Township).

Sources: Expenditure data obtained by Clerks and/or Administrators of the area municipalities.  
Population data supplied by the Regional Municipality of Hamilton-Wentworth, Planning and Development Department.



TABLE 28 FIRE PROTECTION EXPENDITURES PER \$1,000 OF EQUALIZED ASSESSMENT IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1975	1976	% Change 1975-1976	1977	% Change 1976-1977
	\$	\$		\$	
Ancaster	1.48	1.85	25.0	1.90	2.7
Dundas	2.37	2.31	-2.5	2.62	13.4
Flamborough	0.71	0.84	18.3	1.33	58.3
Glanbrook	0.57	1.51	164.9	0.67	-55.6
Hamilton	2.80	3.09	10.4	3.15	1.9
Stoney Creek	0.83	0.92	10.8	1.00	8.7
REGIONAL AVERAGE	2.43	2.68	10.3	2.76	3.0

Sources: Expenditure data supplied by Clerks and/or Administrators of the area municipalities. Assessment data obtained from the budget documents of the Regional Municipality of Hamilton-Wentworth for the years noted.



TABLE 29      NUMBER OF FIRES AND TOTAL FIRE LOSSES IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY FOR SELECTED AREAS

Municipality	1968		1972		1975		1976		1977 (Oct. 31)	
	Fires	Losses (\$'000's)	Fires	Losses (\$'000's)	Fires	Losses (\$'000's)	Fires	Losses (\$'000's)	Fires	Losses (\$'000's)
Ancaster	62	39.4	44	78.9	33	228.3	32	282.2	10	45.3
Dundas	64	33.7	57	210.1	53	49.1	71	230.3	34	106.1
Flamborough	38	206.4	59	332.6	45	597.3	29	246.2	22	443.3
Glanbrook	30	50.4	44	106.9	26	155.7	24	197.9	11	154.8
Hamilton	925	1,518.9	906	1,470.3	1060	3,706.9	989	3,805.2	737	2,731.0
Stoney Creek	52	263.9	107	256.7	82	428.6	96	363.1	52	299.6
REGIONAL TOTAL	1171	2,112.7	1217	2,455.6	1299	5,166.0	1241	5,124.9	866	3,780.0
PROVINCIAL TOTAL	22007	57,844.5	26102	79,237.6	23913	131,552.1	23109	143,102.4	N.A.	N.A.

Sources:      (1) Annual Report of the Fire Marshal for 1968, Ontario Department of the Attorney General.  
                  (2) Office of the Fire Marshal, Fire Losses in Ontario 1972, 1975, 1976, Ontario Ministry of the Solicitor General.  
                  (3) Data for 1977 provided by the Office of the Fire Marshal.





TABLE 30 FIRE LOSSES PER CAPITA IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY FOR SELECTED YEARS

Municipality	1968	1972	% Change 1968-1972	1976	% Change 1972-1976
	\$	\$		\$	
Ancaster	2.59	5.26	103.1	19.90	278.3
Dundas	2.12	12.10	470.8	11.99	-0.9
Flamborough	9.47	14.54	53.5	10.39	-28.5
Glanbrook	5.34	10.66	99.6	19.70	84.8
Hamilton	5.18	4.83	-6.8	12.19	152.4
Stoney Creek	10.21	9.29	-9.0	11.96	28.7
REGIONAL AVERAGE	5.54	6.18	11.6	12.52	102.6
PROVINCIAL AVERAGE	7.92	10.13	27.9	17.60	73.7

Sources: Fire loss data obtained from sources specified for Table 29. Population data supplied by the Regional Planning and Development Department, Hamilton-Wentworth.



TABLE 31 FIRE LOSSES PER \$1,000 OF EQUALIZED ASSESSMENT IN THE HAMILTON-WENTWORTH REGION BY MUNICIPALITY, 1975, 1976

Municipality	1975	1976	% Change 1975-1976
	\$	\$	
Ancaster	1.87	2.28	21.9
Dundas	0.29	1.30	348.3
Flamborough	3.08	1.16	-62.3
Glanbrook	1.95	2.30	17.9
Hamilton	1.29	1.28	-0.8
Stoney Creek	1.49	1.16	-22.1
REGIONAL AVERAGE	1.38	1.32	-4.3

Sources: Information on fire losses obtained from Fire Losses in Ontario 1975, 1976.  
Assessment data obtained from Regional budget documents for the years selected.



fire losses per capita declined. The opposite occurred in Hamilton and Stoney Creek. During the first four-year period, fire losses per capita showed a decline while during the second four-year period they increased and, in the case of Hamilton, fairly dramatically. Both Ancaster and Glanbrook registered increases during each four-year period. Table 31 once again illustrates the extremely variable nature of fire losses.

Data on fire losses and fire protection expenditures is combined in Table 32 for 1976. Whether fire loss and expenditure data is categorized in per capita terms or per \$1,000 of equalized assessment, the pattern in the Region remains the same. Hamilton and Dundas, which spend the most on fire protection measured in terms of either indicator, rank in the middle third with respect to fire losses. Stoney Creek and Flamborough, which spend the least on fire protection, also rank the lowest in terms of fire losses. The municipalities of Ancaster and Glanbrook, whose fire losses are the highest in the Region, occupy the middle position in terms of spending. In making these observations several qualifications must be stated. First, both Hamilton and Dundas contain old housing stock which may be more fire prone than newer dwellings in a municipality like Stoney Creek. Second, Hamilton in particular has much more residential, commercial, industrial and institutional property to protect compared to other municipalities in the Region. Third, in rural areas such as Glanbrook and Flamborough, it is a moot point whether even full-time men could significantly decrease fire losses given the dispersed population and the nature of some of the occurrences (e.g. barn fires). Therefore, to a certain extent, fire loss data is a questionable indicator of fire protection effectiveness. Glanbrook tends to be ranked higher than Flamborough because the former has less than half the population of the latter and approximately one-third of the assessment. If we refer to Table 29 it is apparent that in absolute terms fire losses in Glanbrook are significantly less than those in Flamborough.

How does Hamilton-Wentworth compare with other regions in terms of fire protection costs and fire losses? Table 33 makes such a comparison for the year 1976 on the basis of per capita fire losses and fire protection costs. Of the five regions examined, Hamilton-Wentworth is the second lowest both in terms of per capita fire losses and per capita protection costs. Also, the Region was below the provincial per capita fire loss of \$17.60. With the exception of Metropolitan Toronto, the five regions compared are roughly similar in terms of population, patterns of urban and rural development and available resources, i.e., men and equipment. Therefore, fire losses and fire protection costs in the Region are reasonably in line with other areas of the province.



TABLE 32 RANKING OF FIRE DEPARTMENTS ACCORDING TO FIRE LOSSES AND FIRE PROTECTION EXPENDITURES PER CAPITA AND PER \$1,000 EQUALIZED ASSESSMENT FOR 1976

Municipality	Fire Losses Per Capita	Municipality	Fire Protection Expenditures Per Capita
1. Ancaster	\$19.90	1. Hamilton	\$29.50
2. Glanbrook	19.70	REGIONAL AVERAGE	25.52
REGIONAL AVERAGE	12.52	2. Dundas	21.29
3. Hamilton	12.19	3. Ancaster	16.18
4. Dundas	11.99	4. Glanbrook	12.96
5. Stoney Creek	11.96	5. Stoney Crook	9.48
6. Flamborough	10.39	6. Flamborough	7.68

Fire Losses Per \$1,000 Equalized Assessment		Fire Protection Expenditures Per \$1,000 Equalized Assessment	
1. Glanbrook	\$ 2.30	1. Hamilton	\$ 3.09
2. Ancaster	2.28	REGIONAL AVERAGE	2.68
REGIONAL AVERAGE	1.32	2. Dundas	2.31
3. Dundas	1.30	3. Ancaster	1.85
4. Hamilton	1.28	4. Glanbrook	1.51
5. Stoney Creek	1.16	5. Stoney Creek	0.92
6. Flamborough	1.16	6. Flamborough	0.84

Source: Calculated from data supplied by area municipal fire chiefs.





TABLE 33      COMPARATIVE FIRE PROTECTION COSTS AND FIRE LOSSES, 1976

Region	Per Capita Fire Loss	Per Capita Fire Protection Cost	Fire Protection Costs
	\$	\$	\$
Hamilton-Wentworth	15.49	25.57	10,445,613
Metro Toronto	29.70	29.92	64,392,962
Niagara	19.65	19.31	6,926,698
Ottawa-Carleton	11.33	30.22	15,313,099
Waterloo	16.20	27.58	7,894,442

Source: Office of the Fire Marshal



## Issues

There would appear to be eight major issues related to fire protection in Hamilton-Wentworth. Some are discrete, others are interrelated. They may be summarized as follows:

### Training

It is essential that fire fighters be well trained both in terms of their ability to fight fires and to prevent them. As one might expect, all fire chiefs in Hamilton-Wentworth agree with this statement. They differ on how much and what kind of training is necessary and who should be responsible for this activity, particularly with respect to the concept of regional cooperation.

The amount of training received by fire fighters in the Region varies from the two hours per day given in Hamilton to the two hours every other week provided for members of the Dundas Fire Department and several of the volunteer organizations. How much training is enough? Certainly one factor which must be considered is whether a department employs full-time fire fighters or volunteers. There is no doubt that a practical limit exists to the amount of time a volunteer fire fighter can give to training. Within such a constraint it is clearly important that the limited training time available for volunteers is put to its best use.

The type of training required reflects the nature of the fire protection function in a particular municipality. In turn, the nature of fire protection is very much linked to the pattern of land use development which exists. Stated simply, rural areas tend to have few alarms while urban areas have considerably more. Also, fire fighters in rural areas in most instances must bring their source of water with them; urban and suburban companies can usually tap into a municipal hydrant system. These differences affect the training function. Volunteer fire fighters in rural areas must spend more of their limited training time carrying out such practical drills as driving vehicles, running hose lines and using self-contained breathing apparatus. The theoretical aspects of fire protection are given some attention but not to the extent they might be if more time were available. Large urban departments certainly do not ignore practical drills pertaining to fire fighting tactics. However, given the greater availability of their men, more emphasis can be placed on classroom instruction.

The resources that a fire department can devote to the training function also must be considered. Full-time and composite departments are in a position to send their fire fighters to the Ontario Fire College or elsewhere to receive additional training and to develop their instructional skills. For the volunteer fireman, a stay at the Ontario Fire College or any other activity which takes him away from his job is beyond question since in very few instances would compensation be received for taking this



initiative. Also, full-time and composite departments have the capacity to mount an in-house training program for their personnel. In fully volunteer departments in-house programs face significant constraints both in terms of the time and resources available.

Clearly a potential role for the Ontario Fire Marshal exists with respect to the training of volunteers. The expertise and resources of the Fire Marshal's Office could be used to run courses for volunteer departments and to run them at times when volunteers could easily participate, i.e., week nights and weekends. The volunteer fire chiefs in Hamilton-Wentworth were unanimous in their support for a greater role for the Fire Marshal in training. They also felt that most of the courses put on either by the Regional Fire Coordinator or the Hamilton Fire Department have been useful; however, there is the view that fighting fires in urban areas is somewhat different than fighting fires in rural areas and that on some occasions personnel from the larger departments have not been sufficiently cognizant of this fact.

Regional cooperation in training would be helpful in the sharing of resources and expertise. In 1974, the Regional Fire Coordinator proposed a regional training facility which would be located adjacent to the proposed Hamilton station on Stone Church Road and Upper Ottawa Street. This proposal, which was also put forward at the same time as the emergency fire service plan, met unanimous opposition from the suburban and rural chiefs. This opposition appears to be based on the perception that the training complex would be a Hamilton facility geared to Hamilton's needs and giving priority to Hamilton's fire fighters. This viewpoint was particularly strong among the volunteer chiefs. Of course, a corollary to this statement is that all the fire departments would be paying for a Hamilton facility (one which it is building anyway) and deriving little benefit from it. Virtually all of the volunteer chiefs support the idea of a regional training complex in principle; however, they are concerned about access to such a facility and whether or not it would be relevant to the nature of fire protection in their municipalities. The idea of a regional training facility is not dead but it is one which requires a great deal more discussion.

#### Mutual Aid and the Emergency Fire Service Plan

Despite recent suggestions that Hamilton is bearing the brunt of fire protection activity under the mutual aid scheme, none of the fire chiefs in the Region considered that this was so, including the chief of the Hamilton Fire Department. An examination of the data leads us to believe that not only are mutual aid calls few in number but that in many instances they may be inflated, particularly in the rural areas where assistance given to other stations within the same municipality is often recorded as a mutual aid call. Also, one must consider more than direct assistance given or received in terms of "keeping score" under the mutual aid scheme. In addition, one must consider that on certain



occasions suburban departments are put on standby while a major fire is taking place in a portion of Hamilton. For example, during 1976 Stoney Creek received three standby calls for the eastern part of Hamilton. Ancaster and Dundas in the west have also been put on standby for the city. No one objects to these procedures. It is generally accepted that the mutual aid system works to the benefit of all departments in the Region. Therefore, we see no particular problems with it at this time.

The emergency fire service plan, however, is another matter. The responsibility for formulating such a plan rests with the Regional Fire Coordinator as outlined in section 133 of The Regional Municipality of Hamilton-Wentworth Act. The key issue is whether or not such a plan is needed for peace-time emergencies given the existence of mutual aid. The proposed emergency fire service plan is identical to mutual aid with one exception, namely that the chain of command is in effect reversed. That is to say, under the emergency plan the regional coordinator assumes overall direction of fire fighting resources in the Region while under mutual aid the chief of the department requesting assistance remains in control of the situation. Given some of the tension which exists between the Fire Coordinator, who is the chief of the largest and only full-time department in the Region, and the other chiefs, the emergency fire service plan rightly or wrongly has been perceived as the thin edge of the wedge for a regional department. Once again, this would appear to be a matter for discussion among the various chiefs and elected officials. In addition, staff from the Fire Advisory Services section of the Fire Marshal's Office might be involved in any re-assessment of the mutual aid and emergency fire service plans.

### The Regional Fire Coordinator

The role of the Regional Fire Coordinator in Hamilton-Wentworth has undoubtedly been contentious. As mentioned previously, controversy has surrounded the proposals for an emergency fire service plan and a regional training facility. The former proposal arises directly out of the Coordinator's statutory responsibility under the Regional Act. The latter has support in principle from most municipal fire chiefs.

The Regional Fire Coordinator, much like the Fire Marshal, lacks statutory authority to carry out his coordinating activities. This is the case in all other regions, counties and districts of the province with one exception, namely Oxford County. In the County of Oxford Act, 1974, section 132 authorizes the Oxford Fire Coordinator to establish "a communications system and training facilities for fire fighters". Hamilton-Wentworth already has a central communications system although, as stated above, Dundas does not participate in it and Ancaster has not adopted all of its operational procedures.







Should the Regional Fire Coordinator in Hamilton-Wentworth have statutory authority over the other chiefs in the Region with respect to certain fire protection activities? In answering this question it is necessary to consider three things, namely cost, effectiveness and alternatives. The cost of any expansion of the Regional Fire Coordinator's area of responsibility can be estimated by examining several of the specific proposals which have been advanced. For example, in February, 1973 the current chief of the Hamilton Fire Department submitted a brief on fire protection options in Hamilton-Wentworth to the city's Regional Study Group.<sup>1</sup> One of the options identified for a two-tier regional municipality with fire protection as a local function was the appointment of a Regional Fire Coordinator having statutory responsibility for the preparation of an emergency fire service plan as well as fire prevention, training and communications. Under this option it would be necessary for the Hamilton department to hire an additional twelve fire fighters for fire prevention and training activities and two clerical employees as well as to make provision for internal promotion to officer ranks. A second proposal was advanced by the Regional Fire Coordinator in April, 1975 involving the assumption of responsibility for training and communications.<sup>2</sup> The annual operating cost of training 200 men outside of the City was estimated to be approximately \$166,000. In addition, an expenditure of \$250,000 would be necessary to construct a training tower. Total costs of this regional training scheme would be apportioned on an equalized assessment basis.

If the Regional Fire Coordinator were to assume responsibility for fire training, prevention and communications, would the effectiveness and efficiency of these fire protection activities increase? In large measure this question can only be answered in terms of an assessment of the current state of these activities. Considering training first, the concept of a regional training program and training complex is supported in principle by the suburban and rural chiefs. Their reservations about such an arrangement are two-fold. First, they are unsure about the access which their departments would have to the training facility. This is particularly true of the volunteer chiefs. Second, most of the chiefs are concerned about the relevancy of programs given by personnel from a large urban department to fire fighting operations in rural and semi-rural areas. It would appear that neither problem is beyond solution. A starting point would be a more open and calm discussion of the concept of regional cooperation by both the local chiefs and elected officials. Also, the Regional Fire Coordinator's role could become that of a resource provider, particularly

1 Brief submitted to Mr. K. E. Avery, Secretary, Hamilton Regional Study Group, February 8, 1973.

2 The Spectator, April 11, 1975, page 10.



in relation to the preparation of instructional materials. This specific service might be profitably undertaken with the assistance of the Fire Marshal's Office. Finally, access to the training complex which Hamilton proposes to build could be put on a "user pay" basis rather than an equalized assessment basis. There is little doubt that some form of regional cooperation is a sound idea, particularly for volunteer departments.

Fire prevention work increases in importance as a municipality matures, i.e., as its level of residential, commercial, industrial and institutional development increases. As discussed below, several municipalities in the Region are slated for a significant amount of new development. In this regard a uniform level of fire prevention service is highly desirable and certainly this could be accomplished through the efforts of the Regional Fire Coordinator. However, it might also be done by increasing the full-time manpower of certain local departments and this must be considered as a viable alternative to the regionalization of fire prevention services.

A certain measure of regional cooperation already exists with respect to fire communications. Complete regionalization of this function would primarily affect Dundas in that it would lose its investment in what appears to be a good communications system. The question of cost would have to be considered in any such change. Also, given that the Dundas system is working well one might want to leave the current arrangements in place. Finally, regionalization would necessitate the use of district and zone identification numbers in Ancaster, a change which does not appear to pose very many problems.

### Full-Time Versus Volunteer Fire Fighters

In Hamilton-Wentworth there are one full-time department, three composite departments and seven completely volunteer departments. It is generally acknowledged that in urban and suburban areas, a certain number of full-time fire fighters are required. This reflects the fact that more fires tend to occur in such areas and the need for fire prevention is greater. However, in rural areas where the number of alarms is considerably lower, well-trained volunteers can be an effective alternative to full-time fire fighters.

It would appear to us that most of the departments in the Region have a sufficient component of volunteer fire fighters where volunteers are still employed. It is also apparent that to convert all volunteers into full-time firemen or even a significant portion of them would involve large cost increases which would have to be justified in terms of the level of fire protection required in certain areas.

Another matter which is often raised, particularly in relation to composite local departments or the



establishing of a regional department, is whether or not full-time and volunteer fire fighters can co-exist. Volunteers are certainly not in fire protection for the money they receive. No doubt they derive a certain amount of psychic reward from their participation in a community-oriented activity. There is some evidence in Hamilton-Wentworth that volunteers and full-time men can work together. This is illustrated in Stoney Creek which has a relatively large force of volunteers. Morale among Stoney Creek's volunteers is high for at least two reasons. First, the department's full-time men have been recruited from volunteer ranks and are considered volunteers during their off hours. Second, volunteers play a responsible role in fire protection operations. Full-time and volunteer personnel can co-exist if these considerations are kept in mind.

### Central Dispatching and Communications

This area of regional cooperation appears to be working quite well. There have been some problems in the suburban and rural areas in terms of identifying the location of a fire but most chiefs in the Region are willing to attribute these problems to human error which can be corrected rather than systemic error. It is, of course, in regard to locating fires that the "local knowledge" argument is often raised in support of small fire departments. Its validity is questionable. In both Flamborough and Glanbrook a number of new residents have moved in who are not known to the local fire fighters. Also, the existence of concession numbers based on old municipal boundaries and in some cases the absence of house numbers complicate the task of identifying the location of an alarm. In fact, one chief in Flamborough suggested that the absence of house numbers was a very real problem for his department.

Should Dundas continue to remain outside this system? This is a very difficult question to answer since Dundas has already made a considerable investment in a communications system, including district alarms. It would be interesting to determine what Dundas' system has cost in comparison to what participation in the regional system would have cost. Determining the cost of the Dundas system is complicated by the fact that it was included as part of the allocation for a new station in 1972. There is little doubt, however, that participation in the regional system is the cheaper alternative. For example, while Stoney Creek's contribution to the central dispatching system during 1975 was \$14,000, the estimated cost of operating its own system would be about \$75,000 per year.<sup>1</sup> It seems that the citizens of Dundas are willing to pay more in order to have a system operated by local people.

1 The Spectator, December 3, 1975, page 11.





## Future Development Trends

Regional planning projections indicate that the suburban and rural area municipalities in the Region will experience significant levels of industrial, commercial and residential development during the next 20 years. With respect to industrial development Stoney Creek is scheduled for 1,000 acres along the south side of the Queen Elizabeth Way; Ancaster, 700 acres (intersection of Highways 2 and 403); Glanbrook, 750 acres (south of Highway 53); and Flamborough, 300 acres (intersection of Highways 5 and 6).<sup>1</sup> Projected residential development for Waterdown is 1,400 acres while the Saltfleet Community Development and Mount Albion Estates projects will continue to grow. In Dundas substantial residential development is projected for the western part of the municipality along Highway 99.

The implications of these trends for fire protection are profound in terms of the deployment and training of fire fighters, the siting of new fire stations, the purchase of equipment and the standard of fire prevention work. Increased development tends to increase the need for a higher level of fire protection, a need which may be met by additional manpower, equipment, facilities and specialized services. At this point some municipalities have formal plans for an increased level of service, others do not. Stoney Creek intends to build three new fire stations by 1982 and to have 24 full-time fire fighters by 1985. Dundas has earmarked capital funds for a new sub-station (1980) while Ancaster's plans for another station are at best speculative. Neither municipality has indicated what additional manpower would be required if these facilities are built. Glanbrook and Flamborough do not appear to have made specific plans for additional manpower equipment and facilities.

The fruition of these development projections will undoubtedly necessitate additional full-time manpower, several new fire stations and a general increase in the level of service provided, particularly with respect to fire prevention. Both Stoney Creek and Dundas appear to be in a position to increase the quality and quantity of their fire protection services. Ancaster should probably consider the addition of more full-time personnel within the next several years. Glanbrook and Flamborough are more problematic. The former must not only consider the hiring of full-time men but also an arrangement for the effective protection of its new industrial area. Hamilton's station at Upper Ottawa Street and Stone Church Road is situated well in terms of protecting this area. Glanbrook may have to choose between a significant addition of full-time men in order to upgrade training, fire prevention and operational activities or a fire protection agreement with Hamilton. Flamborough itself faces similar choices with respect to the Waterdown area. Full-time fire fighters will be required as development proceeds.

1 Information provided by the Hamilton-Wentworth Planning and Development Department.





## Fire Prevention

Fire prevention activities are becoming increasingly important not only for large full-time departments but also for small rural departments. For example, several rural chiefs have remarked that in recent years an increasing number of chimney fires have occurred within their municipalities. Some felt that inspection of such homes on a routine basis might have prevented a number of fires. However, their volunteers do not have the time to provide this level of fire prevention activity.

Fire prevention activities vary from Hamilton's very comprehensive program to the ad hoc and informal program carried out by rural departments. In recent years, the composite departments in Stoney Creek and Dundas have augmented their fire prevention activities by carrying out routine home inspection programs. Fire prevention activities in Ancaster have been limited by the absence of available manpower. In particular, Ancaster has not been able to conduct comprehensive inspection of industrial, commercial and institutional premises and does not have a mandatory home inspection program. The nature of the manpower constraints faced by the Ancaster department was discussed earlier. Given the projected pattern of development in Ancaster, more fire prevention is perhaps desirable but it is certainly not possible at current manpower levels.

Without full-time fire fighters, rural departments cannot mount a comprehensive fire prevention program. In order to do so volunteers would have to devote more time to not only the carrying out of inspections but also the additional training required. As discussed earlier, one way of increasing the general level of fire prevention activity in the Region might be by the assumption of this function by the Regional Fire Coordinator. However, there is perhaps a more acceptable (and perhaps less costly) alternative for Glanbrook and Flamborough: the appointment of a single full-time fire chief in both municipalities.

The existence of five chiefs in Flamborough and two in Glanbrook is viewed as a peculiar situation by many including the Ontario Fire Marshal. Four of the five chiefs in Flamborough expressed substantive approval for the concept of a full-time chief, although none suggested that the current arrangement was not working well. The advantages of having a full-time chief should include a unified command structure, an upgrading of fire prevention and training activities and improved administrative procedures (i.e., records, purchasing, budgeting, etc.). In Glanbrook one of the chiefs suggested that a full-time chief would not have sufficient workload to justify the position. The other supported the concept of a full-time chief but did not express any dissatisfaction with the current system. Clearly, in both municipalities the appointment of a single full-time fire chief is a delicate issue but certainly one which must be examined soon. Industrial, commercial and institutional buildings should be



inspected on an ongoing basis and the need to do so will increase as development plans are fulfilled. Also a full-time chief would upgrade the organizational linkages between fire protection and the building inspection and planning functions. Several volunteer chiefs expressed concern about the existing degree of communication and liaison among the officials responsible for these local services.

In Flamborough two chiefs suggested the appointment of a full-time fire prevention officer as an alternative to a full-time chief. The weakness of this proposal is that the officer would have an unclear line of authority and responsibility. Would he report to all five chiefs or to just one? Who would determine the priority of his fire prevention activities? Moreover, such a proposal does not affect the existing fragmented command structure. This alternative could create new problems without resolving very many of the old ones.

#### Bylaws

Municipalities may pass bylaws for the establishment and regulation of fire departments, inter-municipal fire protection agreements, and fire prevention standards. Providing a legal basis for all these elements of fire protection is important.

In Hamilton-Wentworth all municipal fire departments are now established by bylaw. Such bylaws should stipulate the mandatory functions of the department; the line and staff responsibilities of the officers; minimum qualifications for appointment; the method of promotion; and departmental regulations. For the most part bylaws establishing the 11 local fire departments meet these criteria. However, Flamborough's recently passed bylaw appears to be deficient in several respects. First, the number of fire departments being set up is not specified nor is their geographical area of operations. Second, there is no upper age limit with respect to recruitment. Third, no provision is made for either an initial or annual medical check-up. Fourth, fire prevention is not a mandatory activity nor is a minimum level of fire prevention work specified (for example, the annual inspection of schools). Fifth, the minimum training requirement is one practice per month. Perhaps the inadequacy of some of the provisions of the bylaw reflects an apparent failure to consult the municipality's chiefs prior to its passage. It may be desirable to re-evaluate the bylaw in order to incorporate the viewpoints of Flamborough's five chiefs as well as to provide a basis for upgrading fire protection services in the near future.

#### Inter-Municipal Agreements

Mutual aid is the major inter-municipal fire protection agreement among municipalities in the Region



and as stated previously there are no apparent problems. Outside of mutual aid there are only two formal agreements. Ancaster purchases fire protection from Flamborough (Lynden) for a part of its area which is essentially rural. According to the Ancaster fire chief this agreement will continue even if a second station is built. The arrangement appears to be working well although some tension existed regarding a major fire in 1976. Also, there was some suggestion that records of occurrences in the contract area might be improved. Stoney Creek is involved in a mutual aid agreement with Grimsby in the Niagara Region.

There are, however, several verbal agreements between fire departments within and outside of the Region. Municipalities tend to locate fire stations without much regard to the protection of border areas in adjacent municipalities. This is understandable given the absence of regional cooperation or even inter-regional cooperation. Therefore, many municipalities in the province find themselves with border areas that can be protected best by another municipal fire department. The preferred mechanism for resolving this type of problem is a formal contractual arrangement. The de facto mechanism is the verbal agreement. Such agreements are discouraged by the Fire Marshal and explicitly contravene the provisions of most bylaws establishing municipal departments. However, there are some additional problems as well. First, there is the situation of fighting a fire beyond a municipality's borders in which loss of life or substantial damage to property occurs and the effectiveness or efficiency of the department concerned is called into question. Second, there is the matter of fighting a fire in another municipality and having a fire break out in the department's municipality and not being able to devote sufficient resources to the alarm.

Given these potential problems the appropriate procedure is to enter into a formal inter-municipal agreement whereby a specific level of service is purchased for certain areas of a municipality. The difficulty here is who shall decide where these inter-municipal agreements are required. At present, the only way to come to such decisions is for the municipalities concerned to take the initiative. Even the Fire Marshall is not in a strong position in this regard since usually he is invited in by a single municipality to examine fire protection in that municipality only. Perhaps it is time for the Province to consider giving the Fire Marshal statutory authority with respect to this matter.

### Options

A Return to the City County System that existed prior to 1974

Under this option each municipality would continue to provide fire protection as a local responsibility.





Also, there would be no compelling reason why a certain amount of city-county cooperation in training, communications and mutual aid or emergency plans could not be achieved. Furthermore, fire prevention and fire protection services could be purchased by the county municipalities from the city. In fact, the end of the Region might eliminate most of the tension that surfaces occasionally between the Regional Fire Coordinator and local fire chiefs. This uneasiness is grounded in the perception that the Fire Coordinator intends to establish a regional fire department.

### A Single Tier Region

This option necessitates the setting up of a regional fire department. There are several immediate complications to consider regarding a single department. First, Dundas would be brought into the central dispatching arrangement and Ancaster would have to employ the district and zone system. Second, there would no longer be a need for mutual aid; during an emergency equipment and men would be deployed at the direction of a single chief.

Proponents of a regional department suggest that such an approach has many advantages:

1. A uniform standard of fire protection is provided.
2. A broader tax base is available to finance fire protection expenditures.
3. Expertise, particularly with regard to training and fire prevention, can be shared.
4. Economies of scale can be generated with respect to vehicle repair, purchasing, dispatching, training and administration.
5. At major fires all equipment is available and under the supervision of a single chief.
6. Duplication of facilities is avoided.

Are these advantages real? Do alternative approaches exist? These questions must be answered before the concept of a regional department is accepted. A starting point is the contention that a uniform standard of fire protection would be provided. This assumes that a uniform standard is actually required. Does Flamborough require the same level of service as Hamilton, i.e., full-time men deployed on a 24-hour basis? Both the low number of alarms and the apparent effectiveness of volunteers in the rural areas of the Region make this argument questionable.





Clearly, a unified Region would provide a wider financial base for fire services. What is not clear, however, is how the burden of taxation would be distributed among residents in urban, suburban and rural communities. It would seem that a broader revenue capacity is only advantageous if the level of taxation corresponds to the level of service needed and provided. Therefore, the "tax base" argument must be considered in relation to other factors, particularly level of service.

The establishment of a regional department is not the only means of sharing expertise. Formal agreements for training and fire prevention services can be entered into by municipalities. Also, individual municipalities can increase their fire protection manpower if a need exists for higher standards of training and fire prevention. For example, given the current level of fire protection required in Flamborough and Glanbrook, an increase in fire prevention work could be realized by the appointment of a full-time fire chief in each municipality. Additional fire prevention personnel could be hired as the work level expanded. This alternative may be more desirable than a regional department, particularly in terms of cost.

The potential cost of a regional department is often pointed to as a disadvantage. However, its proponents suggest that a large organization allows for economies of scale. This counter-argument appears to be doubtful for a labour-intensive function such as fire protection. Hamilton's spending on salaries and benefits has over the past decade accounted for 85% to 90% of the fire budget. Thus, even if economies are possible in areas such as purchasing and maintenance, savings are being effected in relatively minor budgetary items. Furthermore, in Hamilton-Wentworth a regional department may be costly due to the hiring of additional full-time fire fighters either to augment or to replace volunteers. In 1973 the Hamilton fire chief estimated that 80 full-time staff would be needed in a regional department without volunteers. The salaries and benefits for such personnel (at a probationary level) would be well over one million dollars per annum and this estimate does not include the cost of internal promotions. If volunteers were retained, an additional 60 fire fighters would be needed. Given these potential cost implications, it is essential that the benefits of a regional department be clearly demonstrated.

The unified command structure of a regional department is a definite advantage but perhaps insufficient in itself to justify the establishment of a larger organization. To accept this argument implies that mutual aid and emergency plans are either ineffective or cannot be negotiated successfully. The Region's existing mutual aid system demonstrates that both premises can be questioned.



A regional department would eliminate duplication of facilities. At present there appears to be little if any inter-municipal cooperation with regard to the siting of fire stations. Perhaps, in the current context of fire protection as a local responsibility it is unrealistic to expect such cooperation. However, the use of inter-municipal fire protection agreements provides an alternative means of resolving the problems created by duplication. For example, Glanbrook may have to consider an agreement with Hamilton rather than a new facility in order to provide effective fire services to that part of its territory scheduled for industrial development.

In summary, the case for a regional department must be assessed carefully. It must be demonstrated that the benefits of a larger organization outweigh the costs. Increased efficiency and effectiveness cannot be simply assumed; bigger does not necessarily mean better.

#### An Enlarged City with the Remaining Areas Annexed by Adjacent Counties and Regions

If Hamilton were expanded to include the major built-up areas of Dundas, Ancaster and Stoney Creek, most of the fire stations in those municipalities would become part of the city's network of facilities. With the possible exception of Stoney Creek the residual areas of the annexed municipalities would not have fire stations. This problem might be resolved by the annexation of these areas by adjacent counties and regions. Also, fire protection agreements could be entered into between the city and surrounding municipalities using the former main fire stations of the suburban municipalities. Certainly, a mutual aid agreement would be necessary. Central dispatching, however, is more problematic.

The areas of Ancaster, Dundas and Stoney Creek taken in by Hamilton would probably be serviced by full-time personnel. Volunteers would no longer be employed and this development has obvious cost implications. Of course, any cost increases may be justified since levels of training, fire prevention and fire fighting services would be higher. However, current levels of such activities are generally adequate in the areas under consideration and a higher level of service could be effected by relatively minor additions of full-time personnel (for example, more fire prevention work in Ancaster). From the perspective of fire protection alone the changes created by the adoption of this option would appear to lack sufficient justification.

#### An Enlarged City and a Rural Single Tier Municipality

The implications of this option are very similar to the previous one. The rural municipality might be



deficient in facilities and therefore new stations would have to be built or fire protection agreements entered into with the city. Also, a mutual aid system would be necessary. Cooperation would appear to be possible with respect to dispatching and perhaps even training and fire prevention. Volunteers would still be used extensively in the rural municipality although a full-time fire chief would likely be appointed. Once again, solely from the perspective of fire services one would have to judge whether the costs associated with this option are acceptable given the alternative approaches discussed earlier.

### Modification of the Current System

A number of recommendations to existing fire protection arrangements are implicit throughout this report. It is perhaps useful to list them here:

1. Full-time fire chiefs should be appointed in both Glanbrook and Flamborough.
2. A regional training facility which is accessible to all municipal fire departments and relevant to their different needs should be established.
3. Either the Fire Marshal or the Regional Fire Coordinator should be responsible for identifying areas where inter-municipal agreements are necessary and making appropriate recommendations to the councils concerned. Moreover, both officials should probably assume a more significant resource role with respect to the training of volunteers.
4. The need for an emergency fire service plan and its relationship with the mutual aid system should be re-assessed by local fire chiefs and elected officials.
5. The manpower constraints imposed on the Ancaster department by the operation of an ambulance service should be re-evaluated by the council of that municipality.
6. Municipalities which are scheduled for major increases in development, particularly Glanbrook and Flamborough, should initiate formal planning arrangements in order to anticipate the potential implications for fire services, i.e., manpower, equipment and facilities.
7. Flamborough's fire departments bylaw should be re-evaluated with the active involvement of the municipality's fire chiefs and the Office of the Fire Marshal.



### Six Single-Tier Municipalities

Under this option fire protection would likely be a local responsibility. It is also probable that the current level of inter-municipal cooperation regarding communications and mutual aid would continue. Cooperation in areas such as training and fire prevention might occur but it is extremely difficult to speculate about this given the high degree of autonomy exercised by the individual municipal units under this option. Formal inter-municipal agreements or "verbal" agreements among different sets of municipalities might be the norm.





## POLICING

### Introduction

The principal role of a police department is the maintenance of law and order in the community. This role is comprised of two major sets of activities or functions: a proactive one, in which attempts are made to anticipate and prevent crime, and a reactive one concerned with the effective response to and successful containment of law-breaking activity. The police perform these functions as the major public safety agency in our society and a police department has wide responsibilities and a high profile. The public is quick to judge (and quite often misjudge) the performance of its police - usually on the basis of media reports, the visibility of uniformed police personnel and police vehicles, and any personal experience with the police.

In Hamilton-Wentworth policing is primarily the responsibility of the Hamilton-Wentworth Regional Police (H.W.R.P.). This force was established in 1974, concurrently with the creation of regional government in the area, by the amalgamation of the separate police departments of Hamilton, Stoney Creek, Saltfleet, Dundas and Ancaster.

To be successful, such amalgamation required, and was accorded, careful planning and implementation. At the same time as setting up the H.W.R.P., a single governing body to which it would report was also established, namely, the Hamilton-Wentworth Regional Board of Commissioners of Police.

Initially the H.W.R.P. did not assume responsibility for policing of the entire Region. Aside from the activities of the R.C.M.P., the Harbour Police and the McMaster University security force, a large portion of the Region (Flamborough and Glanbrook) continued to be policed by the Ontario Provincial Police (O.P.P.). It was the intention of the Province that responsibility for these rural areas would be transferred to the H.W.R.P. about four or five years after its formation. However, in 1976, following a change in policy, the Province announced that this transfer was to take place sooner than planned and in April, 1977, the H.W.R.P. assumed responsibility for general policing in Flamborough and Glanbrook with the O.P.P. retaining responsibility for the policing of the provincial highways.

With this transfer the H.W.R.P. was established as the department with full policing responsibility for the second most populous metropolitan area in the province. No great increase in resources was required for the H.W.R.P. was already a substantial department covering a wide range of policing activities. In 1977 a new headquarters was completed - something of a showpiece in Ontario - by which time the H.W.R.P. comprised over 750 personnel and had an annual operating budget of approximately 23 million dollars.



### Statutory Basis

In Ontario policing is a mandatory municipal function under The Police Act. The statute provides for the appointment of boards of commissioners of police at the local level; the amalgamation of municipal police forces; bargaining and arbitration procedures; and the establishment of the Ontario Police Commission. In addition, the Act sets up the Ontario Provincial Police. The Municipal Act also provides for a number of permissive and mandatory responsibilities with respect to policing.

The Ontario Police Commission, a provincial agency within the Ministry of the Solicitor General, plays a significant role with regard to the organization and operation of municipal police forces. The Commission maintains statistics on criminal occurrences and other policing matters; consults with and provides assistance to local police authorities; visits municipal forces periodically; operates the Ontario Police College; coordinates the activities of local police forces in the province; carries out investigations under The Police Act; and hears and decides upon appeals by members of police forces. The extent to which the Province exerts control over policing activities is illustrated by some of the Commission's specific powers. For example, s. 56(1) of The Police Act states that the Ontario Police Commission

may investigate, inquire into and report upon the conduct of or the performance of duties by any chief of police, other police officer, constable, special constable or bylaw enforcement officer, the administration of any police force, the system of policing any municipality, and the police needs of any municipality.

These investigations, which may be carried out under The Public Inquiries Act, may also be initiated without the request of a municipal council (in which case the Province bears the cost of the inquiry). It is interesting to compare the Commission's powers in this regard with those exercised by the Ontario Fire Marshal. Another illustration of provincial control is the Commission's responsibility to arrange for police services in a municipality that does not maintain a police force. Section 5 of the Act empowers the Commission to request that the O.P.P. provide the necessary services and that the cost of such services be charged against the municipality.

The O.P.P. performs four basic policing activities. First, the O.P.P. is responsible for policing those areas of the province not covered by municipal police forces. Second, the provincial force maintains a criminal investigation branch (i.e., the investigation of serious crimes such as murder, kidnapping, rape and armed robbery) which assists



local forces at the direction of the Solicitor General or Crown Attorney. Third, the O.P.P. maintains a traffic patrol on provincial highways. Fourth, it is the duty of the force to enforce provincial liquor laws (i.e., The Liquor License Act, The Liquor Control Act and the prescribed regulations). In Hamilton-Wentworth the primary activities of the O.P.P. are the patrolling of provincial highways and the routine provision of investigative services to the regional police force.

Part VI of The Regional Municipality of Hamilton-Wentworth Act establishes both the Hamilton-Wentworth Regional Board of Commissioners of Police and the Regional Police Force. Provision is also made for the terms of employment of members of the regional force and the transfer of the assets of the previously existing local forces. This is consistent with most other regional acts; the rule in Ontario being that where there are regional governments there are regional police forces.

### History

On January 1, 1974 the H.W.R.P. assumed operational responsibility for policing in four of the Region's six area municipalities, namely, Hamilton, Stoney Creek, Ancaster and Dundas. The O.P.P. continued to provide policing services in the Townships of Flamborough and Glanbrook. This situation was generally consistent with the recommendation of the Steele Commission<sup>1</sup> that a metropolitan police department be established to service the urban areas and that the O.P.P. remain in the rural areas. The new regional force, however, was given responsibility for the rural portions of Ancaster, Dundas and Stoney Creek.

Prior to the establishment of the Region local police forces existed in the City of Hamilton and four municipalities within Wentworth County (i.e., Town of Dundas, Ancaster Township, Saltfleet Township and the Town of Stoney Creek). The O.P.P. policed the remaining county municipalities - the Village of Waterdown and the Townships of Beverly, Binbrook, East Flamborough, West Flamborough and Glanford - without charge. The largest department was in Hamilton and it provided a wide range of specialized policing activities.

With the passage of The Regional Municipality of Hamilton-Wentworth Act (Bill 55) in June, 1973, the planning required for the setting up of a regional force was initiated. In July the Ontario Police Commission convened a meeting in Hamilton which included representatives from the various local police departments and boards of police commissioners. A Steering Committee consisting of representatives of the

1 Hamilton-Burlington-Wentworth Local Government Review, op. cit., pp. 119-121.





local boards and a Working Committee of senior police officers from the five local departments were set up. The latter was charged with the task of detailed operational planning for the new force and its report was submitted to the Steering Committee in October.

The Working Committee's report contained a number of recommendations pertaining to the organization, operation and financing of the regional force. For example, administrative boundaries were established for policing operations. Area 1 included the western part of the city below the escarpment and Dundas; Area 2, the eastern part and Stoney Creek; Area 3, the mountain area of the city and Ancaster (see Map 3). In addition, the eventual expansion of the regional force into Flamborough and Glanbrook was anticipated to take place over a three to five year period. Assumption of policing in these rural municipalities was in keeping with the plans of other regions and provincial policy.<sup>1</sup>

The implementation of regional policing appears to have taken place smoothly. However, in September, 1976 the Provincial Treasurer announced the end of general duty policing by O.P.P. personnel in the rural portions of Hamilton-Wentworth and other regions effective April 1, 1977. This shift in provincial policy with respect to the full implementation of regional police services restricted the O.P.P. to a highway patrol function. Given this new timetable both the regional force and the O.P.P. undertook a joint planning exercise in order to prepare for the eventual transition. On April 3, 1977 the Hamilton-Wentworth Regional Police Force assumed responsibility for the policing of Glanbrook and Flamborough.

### Organization

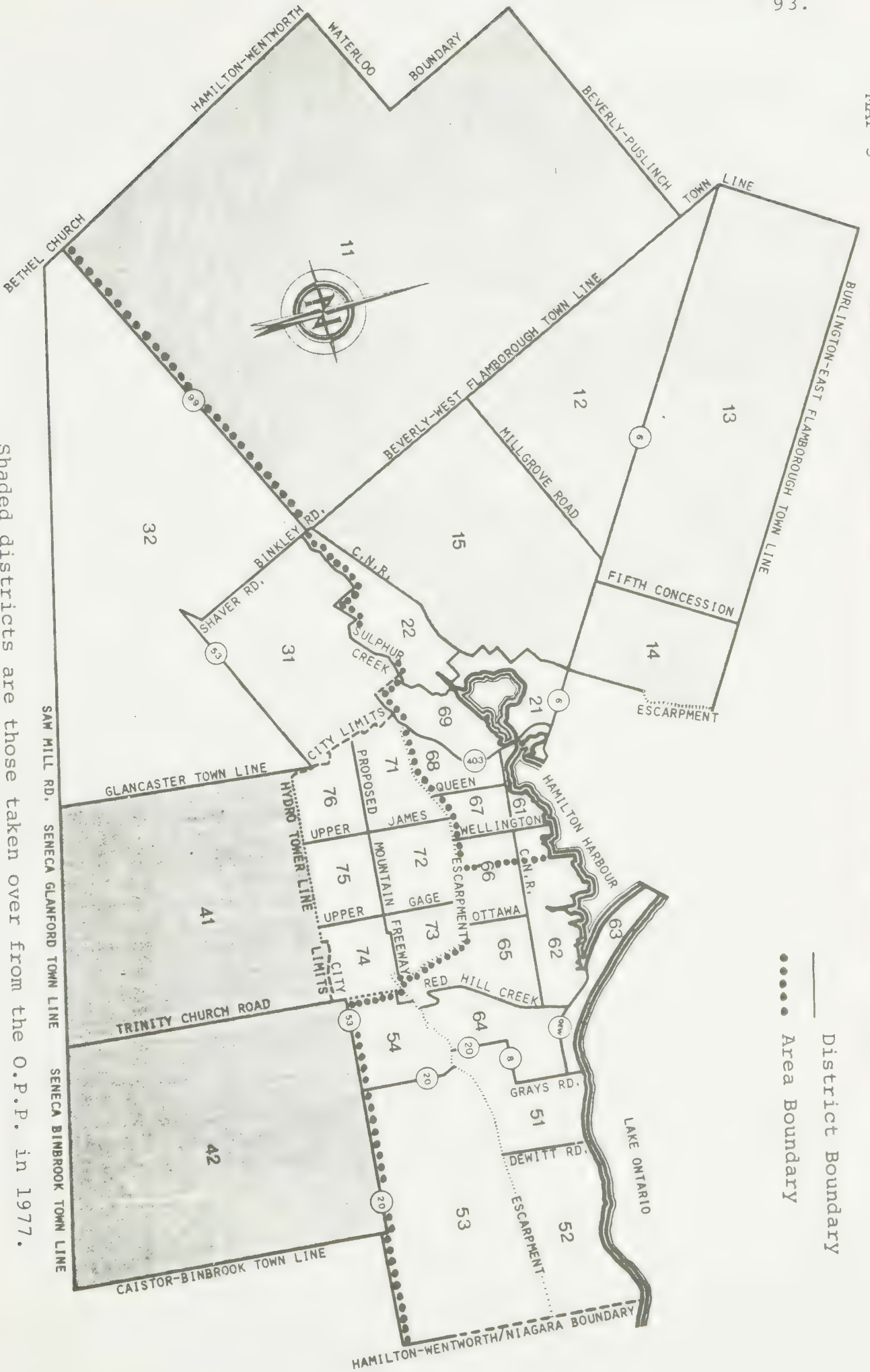
The organization of policing in the Region consists of two major elements. The first is the Hamilton-Wentworth Regional Board of Commissioners of Police. The Board is the governing authority of the regional police force and has exclusive responsibility for policing and the maintenance of law and order in the Region. It consists of five members, two members of Regional Council and three members appointed by the Province (one of whom must be a county or district court judge). The Board has a dual reporting relationship - to Regional Council and, more importantly, to the Government of Ontario through the Ontario Police Commissioner. Under The Police Act the Board has the authority to make all regulations regarding the operation of the police force including the appointment of personnel. It is funded by the

1 TEIGA, Proposal For Local Government Reform in the Area West of Metropolitan Toronto, p. 29.





HAMILTON-WENTWORTH REGIONAL POLICE - AREA AND DISTRICT BOUNDARIES



Shaded districts are those taken over from the O.P.P. in 1977.



regional municipality and is responsible for the preparation of its own budget. This it submits to Regional Council but in the case of any disagreement the final authority for the approval of the budget rests with the Ontario Police Commission not with Regional Council. Although The Regional Municipality of Hamilton-Wentworth Act treats the Board of Commissioners of Police as a regional special purpose body, it is primarily an agent of the Province.

The second organizational element is the Hamilton-Wentworth Regional Police Department. The Department reports to the Board of Commissioners of Police and is responsible for the actual carrying out of the activities necessary to maintain law and order in the Region. The organization of the Regional Police Department is depicted in Chart 2. The Department is under the general direction of the Chief of Police and remaining rank structure in descending order is as follows:

- deputy chief
- staff superintendent
- superintendent
- staff inspector
- inspector
- staff sergeant
- sergeant (1st class)
- sergeant (2nd class)
- constable (1st class)
- constable (2nd class)
- constable (3rd class)
- constable (4th class)

There are five major organizational levels in the Department. The largest internal subdivisions are bureaus followed by services, divisions, sections and branches.

The organization of the Department may be conceptualized in terms of line, auxiliary and staff functions. Line activities essentially come under the Operations Bureau headed by a deputy chief. The basic line activities are reflected in the divisional structure, i.e., patrol, traffic, criminal investigation and special services. Auxiliary and staff activities are under the Administration Bureau also headed by a deputy chief. Major auxiliary activities (i.e., personnel, finance, records, etc.) are reflected in the sections and branch levels of the Bureau. The Planning and Research Section under Administrative Services and the systems analyst attached to the Deputy Chief (Administration) represent the major staff components. The Youth Division, essentially a line unit, is also part of the Administrative Bureau.

### Activities

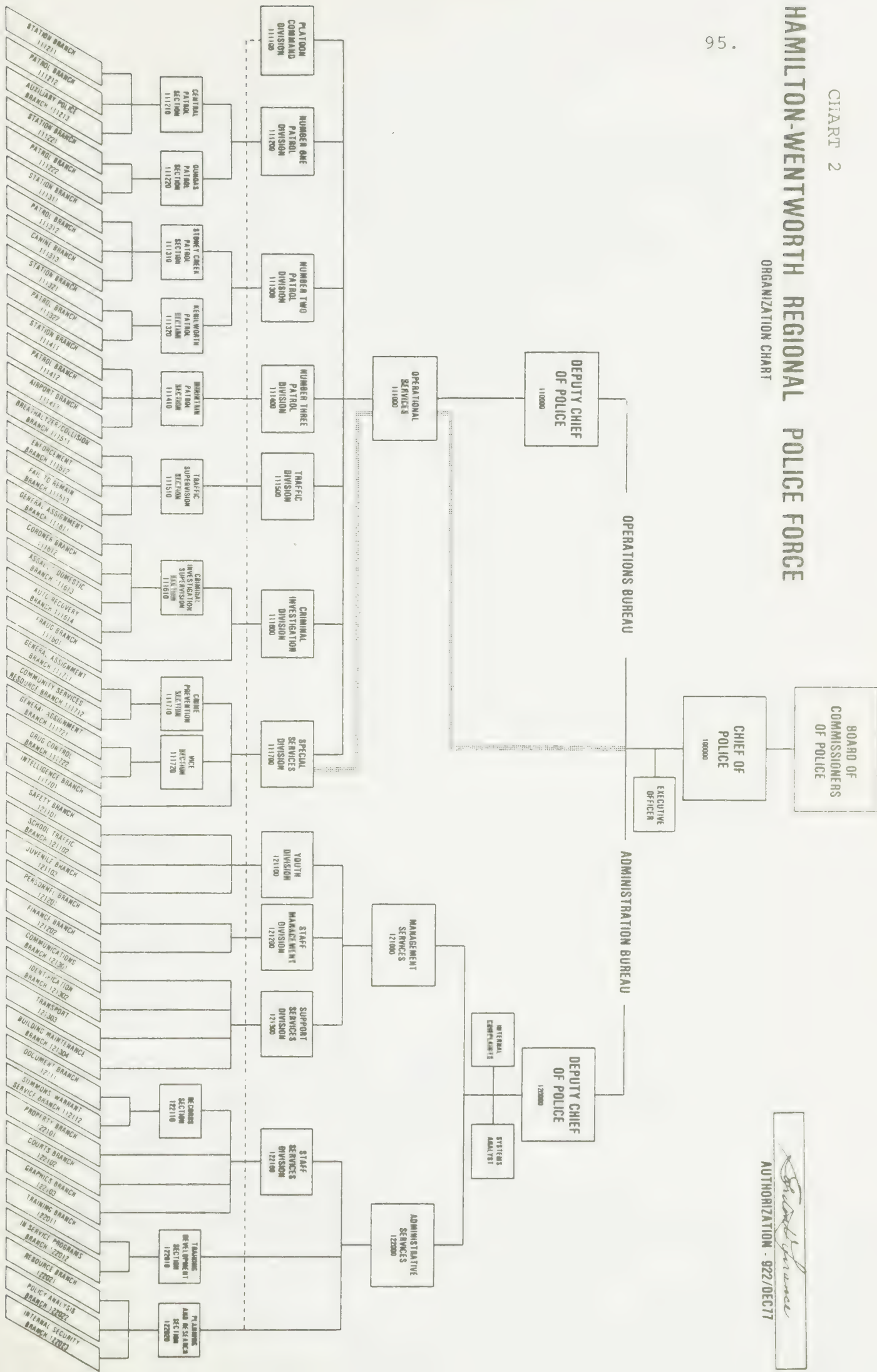
Despite being open to a certain amount of scrutiny, police activities are not well or readily understood. This



# HAMILTON-WENTWORTH REGIONAL POLICE FORCE

ORGANIZATION CHART

AUTHORIZATION - 922/DEC17







is true partly because there are a number of different ways in which policing activity can be conceptualized and analysed. The citizen often views police activity in geographic terms, partly on the basis of how much policing appears to be occurring in the neighbourhood in which he lives. Geography does provide an obvious basis on which to organize policing and this is apparent in the H.W.R.P. It has a three patrol area system. Policing can also be examined in terms of the target group of activities. The H.W.R.P. has a Youth Division. Policing may also be analysed in terms of the type of crime which occurs. The police statistics which receive the most attention are in fact crime statistics. The type of crime is sometimes also used as the basis for organizing activity. The H.W.R.P., for example, has a Drug Squad. Indeed, an effective police department invariably has structured and organized its activities on a variety of different bases. The criminal element knows no bounds and policing activity is required in a very wide range of situations. Some of it can be relatively generalized and decentralized. Other activities are best dealt with in a centralized fashion by small specialized units of personnel.

The continuing impact of the automobile in society is felt in the activity and organization of police departments. Traffic related occurrences comprise a significant component of police activity and traffic needs in general tend to be given high priority by police departments. Specialist traffic units are required and traffic duty also involves a significant proportion of a patrol officer's time and effort. Much of the H.W.R.P.'s resources must be devoted to traffic.

Community education and liaison is also undertaken by police departments such as the H.W.R.P. It is imperative that the police educate the public about what they do, what the police need to do and how the public can help the police realize their goals. Simultaneously, it is important for citizens to keep the police informed of their needs and their perceptions of the effectiveness of policing in their communities. Community relations and preventive policing are important.

### Support Services

In order to perform their operational tasks, the police require a number of support or auxiliary services to be undertaken within their own organization. These are not especially visible to the public and include training, records, communications, identification, planning and research, and personnel.

The nature of the relationship between line operations and support services may be illustrated by examining communications, records and training activities. The H.W.R.P. has developed a comprehensive communications





system in order to facilitate the prompt and effective delivery of police services. The radio system now in use consists of P.R.E.P. (Personal Radio Equipped Police) and a mobile transreceiver in all police vehicles. In addition, the regional force has direct access to the Canadian Police Information Centre (C.P.I.C.) in Ottawa. The proposed implementation of the 9-1-1 Emergency Telephone System would augment further the response capability of the force.

With the creation of a regional department a central records system was set up. Prior to 1974 the individual municipal departments maintained their own records. Although this system has not been computerized, it does provide improved access to a wider range of information pertaining to police activities.

Training is another important support activity. It involves both the ongoing use of existing skills and techniques as well as the development of new ones. Before a regional force was set up, only the Hamilton Police Department had developed an in-service training program. The other local forces received training services from both the Ontario Police College and the O.P.P. As a result the level of training which existed in the former local police departments varied greatly. However, the Ontario Police Commission has suggested that this situation was not peculiar to Hamilton-Wentworth. The advent of regional policing has precipitated a number of changes in the area of training. More personnel have been allocated to training activities thereby enriching the force's in-service program. In addition, the existence of a larger force increases the degree of access to and utilization of external training institutions, particularly the Ontario Police College and the Canadian Police College. The former offers a basic course which must be taken by all probationary constables, a general police training course, refresher training, supervisory and administrative training as well as a wide variety of special courses covering topics such as photography, drugs, criminal intelligence, crowd control, traffic law and criminal investigation. The latter also provides a variety of courses including senior police administration and executive development. Finally, the O.P.P. conduct courses each year in a number of specialized areas such as marine, search and rescue, and gas squad training.

### Line Operations

The maintenance of law and order is commonly measured through the use of crime statistics. These must be interpreted with great care since a number of variables can affect both their accuracy and their utility. First, such statistics emphasize unduly only one major aspect of policing. They do not tell the whole story and cannot be used as a general measure of activity or, indeed, success. Second, the quality of any set of figures and the validity



of any comparison made between it and another set of figures is often dependent upon all incidents being reported and characterized in a uniform and consistent manner. Often this does not happen. Third, legislative and methodological changes can distort figures through both changing categories as well as the reporting of specific incidences. Unless all the reporting agencies are employing the same criteria, the same categories, the same reporting methods, comparison is very difficult and sometimes unwise.

Despite these cautions, examination and comparison of these statistics are nevertheless justifiable if only because alternative and better measures are not available. Crime statistics do have their useful purposes. They can provide the public with some indication of the level of police activity in their communities. They can indicate the type of crime being committed in communities and the general whereabouts of criminal activity. They can also assist the community and its elected representatives in making comparisons between their policing and that of other communities.

Table 34 shows the number of calls for service and actual incidences and Table 35 shows the deployment of police personnel in the three operational areas. These tables show in general where police activity is most heavily concentrated and the positive correlation between level of activity and deployment. Table 36 provides a more detailed breakdown of police activity (also refer to Map 3). Certain patterns are apparent and it is obvious that activity is related to both population density and type of development. Police activity related to occurrences is concentrated in the urban core of Hamilton-Wentworth (in police districts 65 to 67) and to a lesser extent in the cores of suburban municipalities (districts 22 and 51). Commercial strip development also appears to have a close relationship to the number of incidences which occur. This is evident in Upper James Street and Queenston Road as shown in districts 64, 71 and 72. Three general levels of activity are apparent in Table 37. These levels have been calculated by taking into consideration population density and pattern of development, deployment of personnel and the number of incidences. The highest level includes districts 61 to 68. During 1976, more than 34,000 occurrences took place in that area; nearly 70% of the total number of occurrences. In 1977, within the same area, there were in excess of 36,000 occurrences, 68% of the total known occurrences in the Region. A lower and medium level of activity is apparent in districts 22, 51, 69, and 71 to 76. In 1976, this area had over 13,000 occurrences, 26% of the regional total and in 1977 it had in excess of 13,000 or 25% of the known incidences. The third and lowest level of activity includes districts 11 to 15, 21, 31, 32, 41, 42 and 52 to 54. In both 1976 and 1977, these districts had only a total of 7% of known occurrences. Moreover, these levels of activity are evident regardless of the type of incident. Finally, it should be pointed out that changes in



TABLE 34                      CALLS FOR SERVICE AND INCIDENTENCES AS  
REPORTED BY AREA FOR SELECTED YEARS

Area	Year			
	1974	1975	1976	1977
<u>CALLS FOR SERVICE</u>				
Area #1	57,522	61,087	64,066	70,755
Area #2	48,905	51,168	52,955	52,655
Area #3	20,112	23,306	25,254	27,042
Total	126,569	135,561	142,275	150,452
<u>ACTUAL INCIDENTENCES<sup>1</sup></u>				
Area #1	20,930	22,680	21,210	23,870
Area #2	16,029	17,043	18,793	19,386
Area #3	6,934	8,259	9,232	9,451
Total	43,893	47,982	49,235	52,707

1    1977 figures refer to incidences known to police.

Source:    Hamilton-Wentworth Regional Police.



TABLE 35      DISTRIBUTION OF PATROL PERSONNEL BY AREA, HAMILTON-WENTWORTH, 1975-1977

Area	Year	Area in Sq.Kms.	% of Pop.	% of Reported Offences	% of Calls for Service	% of Patrol Force Assigned
Area #1	1975	36	32.80	42.27	45.06	47.54
	1976	36	30.25	43.08	45.03	47.84
	1977	344	33.58	45.29	47.03	45.93
Area #2	1975	88	33.91	35.52	37.75	36.52
	1976	88	35.87	38.17	37.22	36.92
	1977	88	32.86	36.73	35.00	35.06
Area #3	1975	134	33.39	17.21	17.19	15.94
	1976	134	33.88	18.75	17.75	16.14
	1977	258	33.56	17.93	17.97	19.01

Source:      Same as Table 34.





TABLE 36 ACTUAL OFFENCES BY DISTRICT 1976-1977

District	Year		District	Year	
	1976 <sup>1</sup>	1977 <sup>2</sup>		1976 <sup>1</sup>	1977 <sup>2</sup>
#11		292	#63	413	555
12		251	64	3,983	4,251
13		84	65	6,326	6,328
14		416	66	8,710	8,776
15		70	67	10,095	11,280
21	160	231	68	2,266	2,420
22	1,546	1,797	69	1,289	992
31	588	360	71	1,881	1,842
32	204	216	72	4,057	3,834
41		253	73	1,513	1,446
42	741	202	74	290	415
51	1,815	1,940	75	323	395
52	704	536	76	376	488
53	209	228	Total	49,235	52,707
54	145	271	Total including O.P.P.	50,966	53,120
61	655	760			
62	1,687	1,778			

1 O.P.P. figures for Districts 11-15 are 990, and for Glanbrook Districts 41 and 42 figures are 741 (as listed).

2 O.P.P. figures for Jan. 1-April 3, 1977 are, for Districts 11-15, 263 and for Districts 41 and 42, 150 occurrences.

Source: Calculated from data provided by the H.W.R.P.



TABLE 37 PATROL AREAS AS RELATED TO POLICE ACTIVITY  
GENERATED BY INCIDENCES

Year	Patrol Area	Level of Activity	Number and % of Incidences <sup>1</sup>
1976	Districts 61-68	High	34,135 (67.0)
	Districts 22, 51, 69, 71-76	Medium	13,090 (25.7)
	Districts 11-15, 21, 31, 32, 41, 42, 52-54	Low	3,741 (7.3)
1977	Districts 61-68	High	36,148 (68.0)
	Districts 22, 51, 69, 71-76	Medium	13,149 (24.8)
	Districts 11-15, 21, 31, 32, 41, 42, 52-54	Low	3,823 (7.2)

1 Total figures are arrived at by adding H.W.R.P. incidences to O.P.P. incident totals for their areas of responsibility (Districts 11-15, 41,42) for 1976 and Jan.-April, 1977.

Source: Calculated from data provided by the H.W.R.P. and the O.P.P.



the methodology of calculating these levels of activity may be made without altering the substance of our main observation, namely that the level of police activity is distributed in a concentric pattern with the highest level in the urban core of the city and the lowest in the rural areas of the Region.

Obviously, there are differences in offenders, offences and victims in different parts of Hamilton-Wentworth. Crime in the core of the City is different from that committed in the rural parts of the Region. The general level of criminal activity, however, is closely related to the extent to which an area is built up and heavily populated.

The figures in the preceding tables naturally prompt consideration of comparisons between Hamilton-Wentworth and other parts of the province. Table 38 shows the major occurrence categories, frequency and clearance rates in Hamilton-Wentworth and in the Niagara, Ottawa-Carleton, Waterloo and Metropolitan Toronto regions. Table 39 compares Hamilton-Wentworth with the province as a whole. These tables suggest that Hamilton-Wentworth has an average level of criminal activity and acceptable clearance rates given differences in population, pattern of development, area and resources among the jurisdictions compared. Most of the offences which occur are relatively minor and only involve the loss of property. For example, in 1976 break and enter, motor vehicle theft and theft under \$200 accounted for approximately 44% of the offences committed in Hamilton-Wentworth. In the same year major offences such as homicide, sexual offences, assault and robbery occurred less frequently (approximately 9% of total offences). Not surprisingly, the clearance rate for these types of crimes tends to be higher than it is for minor offences. In this regard Hamilton-Wentworth's clearance rates are similar to those of other regions. With the exception of Metropolitan Toronto its general clearance rate is also comparable.

The enforcement of traffic regulations is time-consuming and represents another major set of policing activities. In this regard the H.W.R.P. maintain a Traffic Division consisting of 37 uniformed personnel. Table 40 gives some indication of the volume and type of traffic activities handled by the regional force.

Community relations and liaison is an important aspect of policing albeit one which is somewhat difficult to measure empirically. The organizational units of the regional department directly responsible for this set of activities are the Crime Prevention Section of the Special Services Division and the Safety and School Traffic Branches of the Youth Division. However, interaction between the police and the community which they serve is not the exclusive responsibility of these units. Community relations and liaison activities are performed in the first instance by front-line personnel, the constable on patrol. This is clearly the case in Hamilton-Wentworth.



TABLE 38 COMPARATIVE CRIME CLEARANCE RATES, SELECTED REGIONAL AND METROPOLITAN MUNICIPALITIES, 1976\*

Offence	<u>Hamilton-Wentworth</u>		<u>Niagara</u>		<u>Ottawa-Carleton</u>		<u>Waterloo</u>		<u>Metro Toronto</u>	
	No.	%	No.	%	No.	%	No.	%	No.	%
Homicide	21	100.0	20	95.0	46	87.0	9	66.7	84	85.7
Sexual Offences	219	50.2	121	65.3	217	58.5	165	49.1	1,061	67.7
Assaults (not indecent)	3,659	79.8	1,873	29.5	1,320	74.2	1,069	42.4	9,599	80.2
Robbery	348	23.6	168	42.3	622	27.3	101	36.6	1,774	41.1
Break and Enter	5,308	17.3	4,495	22.9	7,502	20.3	2,759	21.1	17,361	40.1
Theft: Motor Vehicle	2,352	17.5	1,640	21.5	3,067	17.3	732	29.9	5,959	21.5
Theft: Over \$200	2,474	11.9	1,615	12.0	4,105	6.7	1,095	10.1	10,299	19.9
Theft: Under \$200	13,728	25.4	10,238	28.6	12,618	31.4	8,067	23.8	48,504	36.8
Have Stolen Goods	342	93.8	226	95.1	370	98.1	39	92.3	5,280	98.9
Frauds	1,957	79.0	1,814	73.6	2,247	45.4	1,216	49.7	11,448	57.0
Prostitution	26	96.2	9	100.0	46	100.0	12	8.3	1,676	96.8
Gaming and Betting	24	79.2	7	100.0	14	92.9	21	28.6	2,923	95.6
Offensive Weapons	213	87.8	294	71.1	237	95.4	88	64.8	1,923	94.8
Other Criminal Code	11,447	40.0	8,721	32.1	6,794	31.4	2,018	40.2	37,382	57.7
Drugs Federal Statute	1,409	99.9	571	89.5	362	95.6	1,208	73.1	6,293	99.6
Other Federal Statute	56	96.4	25	76.0	63	92.1	59	67.8	679	97.5
Provincial Statutes	4,390	88.6	2,143	95.3	3,721	97.9	2,636	92.0	26,600	99.8
Municipal Bylaws	173	75.7	297	52.5	3,216	87.4	278	68.3	1,227	100.0
TOTAL	48,146	42.4	34,277	39.5	46,567	39.2	21,572	39.2	190,092	58.7

\*Does not include areas policed by the O.P.P.

Source: Information provided by the Ontario Police Commission.





TABLE 39 COMPARATIVE MUNICIPAL CRIME STATISTICS, HAMILTON-WENTWORTH AND ONTARIO, 1976

Category	Hamilton-Wentworth			Ontario		
	No.	Cleared by Charge or Other Means	% Clearance	No.	Cleared by Charge or Other Means	% Clearance
Homicide	21	21	100.0	267	236	88.4
Sexual Offences	219	110	50.2	3,036	1,923	63.3
Assaults (not indecent)	3,659	2,921	79.8	34,207	26,694	78.0
Robbery	348	82	23.6	4,103	1,598	38.9
Break and Enter	5,308	920	17.3	65,652	18,877	28.8
Theft: Motor Vehicle	2,352	411	17.5	23,920	5,847	24.4
Theft: Over \$200	2,474	294	11.9	31,949	4,909	15.4
Theft: Under \$200	13,728	3,495	25.4	175,544	52,152	29.7
Have Stolen Goods	342	321	93.8	8,527	8,391	98.4
Frauds	1,957	1,546	79.0	30,465	19,371	63.6
Prostitution	26	25	96.2	1,819	1,754	96.4
Gaming and Betting	24	19	79.2	3,081	2,930	95.1
Offensive Weapons	213	187	87.8	4,323	3,853	89.1
Other Criminal Code	11,447	4,579	40.0	134,633	57,598	42.8
Drugs Federal Statute	1,409	1,408	99.9	16,492	15,799	95.8
Other Federal Statutes	56	54	96.4	2,035	1,858	91.3
Provincial Statutes	4,390	3,891	88.6	83,921	79,217	94.4
Municipal Bylaws	173	131	75.7	21,794	14,159	65.0
TOTAL	48,146	20,415	42.4	645,768	317,166	49.1

Source: Same as Table 38.



TABLE 40                      TRAFFIC STATISTICS - HAMILTON-WENTWORTH  
REGION, SELECTED YEARS

	1974	1975	1976	1977
Collisions	9,599	9,354	9,146	10,011
Fatal Collisions	29	24	28	33
Persons Killed	31	26	29	34
Hazardous Moving Violations <sup>1</sup>	50,039	45,268	39,246	41,129
Public Thoroughfares (kilometres) <sup>2</sup>	1,669	1,690	1,690	2,552

- 1    Variations in Moving Violations figures are due to changes in the weather.
- 2    1974 to 1976 figures do not include Glanbrook and Flamborough since the H.W.R.P. did not assume policing responsibilities until April, 1977.

Source:    Hamilton-Wentworth Regional Police.



The specific nature of community relations and liaison activities may be illustrated by examining the program and activities carried out by the departmental units mentioned above. The Crime Prevention Section deals both with the public and other police officers. Programs and activities directed at the former target group include the coordination of the Block Parents, Operation Identification, Resource Officer and Lock It or Lose It programs; ongoing contact with a variety of community groups such as youth and ethnic groups; the presentation of public seminars and displays; the investigation of certain types of occurrences (e.g., vandalism); and the use of cable TV to present community-oriented programs. Liaison with the latter is maintained through membership in provincial and national police associations concerned with crime prevention.

The Safety Branch of the Youth Division is generally responsible for the safety education of the public, in particular elementary school children. The School Safety Patrol program, the Hamilton Safety School and bicycle 'roadeos' are several examples of what is done at the elementary school level. General safety education is accomplished through liaison with the Hamilton and Dundas Safety Councils, the Safety Officers' Committee of the Ontario Traffic Conference, the Ministry of Transportation and Communication, boards of education, municipal recreation departments and the Hamilton Automobile Club. The primary responsibility of the School Traffic Branch is the training and provision of personnel to assist school children across potentially dangerous street crossings.

### Complaints Procedures

All police forces expect and receive a certain number of complaints from the public. Some of these complaints are legitimate; others merely reflect current trends in the perceptions held by some citizens of policing activities. For example, in recent years more complaints have been received by police departments in the province concerning the use of excessive force by police officers. It is not clear, however, whether police are using more force now than they have in the past.

The H.W.R.P. has established procedures for the handling of both oral and written complaints. In addition, a senior officer is responsible for the handling of these complaints in a sympathetic but correct manner. This official, who is located at headquarters, is physically separate from line operations. A routine analysis of all complaints is made and submitted by the department to the Board of Commissioners of Police every six months. Most complaints are resolved at the departmental level, although a citizen does have further recourse to the Board, the Ontario Police Commission and ultimately the Solicitor General. In addition to these administrative appeal mechanisms redress is always possible through the courts. The procedures employed in Hamilton-Wentworth appear to be working well.



## Resources

Given the role, statutory basis, activities and structure of the H.W.R.P., consideration is required of the resources consumed by the force. The basic resource is, of course, money obtained from the tax-payer. With this, operating and capital expenditures are made on equipment, on facilities and, most importantly, on staff.

In policing, the major item of equipment is the motor vehicle. Table 41 shows how the number of police vehicles in use in the Region has increased since 1968. The H.W.R.P. now requires 60 more vehicles than it did ten years ago. Ninety per cent of this increase has been in cruisers rather than motorcycles or other vehicles and 84 percent of the total of 172 vehicles are now cruisers of various sorts. Table 42 provides a detailed breakdown of vehicles by type over the last four years.

There are presently nine police buildings within the Region (see Map 4). Police headquarters is located in the City of Hamilton, on King William Street. The building houses the Chief, Administrative Staff, C.I.D. Headquarters, Youth Division Headquarters, Special Services Division, Training Branch, Records Section, Communications Branch, Graphics Branch, Police and Public Property Branch, Identification Branch, Traffic Division, Platoon Command Division, Transport Branch Emergency Stores, an indoor range, a courtroom and prisoner holding facilities. Each patrol area has an operations headquarters and a sub-station. The H.W.R.P. Headquarters is also the operations headquarters for Area #1 Patrol Division. The Dundas station operates as the sub-station of Area #1 Patrol Division. The building is devoted to patrol but also has a breathalyzer room and houses a branch of C.I.D. and a Safety Officer. The Stoney Creek station functions as the operations headquarters for Area #2 Patrol Division. The station houses a Canine Branch, Breathalyzer, Juvenile and Safety Officer. The Kenilworth station acts as the Area #2 sub-station and houses a C.I.D. Branch and also has holding cells. The operations headquarters for Area #3 Patrol Division is the Mountain Station. The station houses a C.I.D. Branch, a Juvenile Branch and holding cells. The sub-station for Area #3 Patrol Division is in Ancaster. Unlike the other sub-stations, the Ancaster facility is maintained only on a drop-in basis. The police have other facilities as well. There is a station in Waterdown maintained on a drop-in basis. There is a Mt. Hope office, the result of a contractual arrangement with the federal government to provide policing at Mt. Hope airport. Glanbrook patrol personnel use this facility for lunch periods. The Sherman Avenue station is no longer operational although the School Traffic Branch and the Auxiliary Police remain there.





TABLE 41                      AUTHORIZED STRENGTH FOR POLICE VEHICLES,  
SELECTED YEARS

Year	Force	Cruiser	Motorcycle	Others	Total
1968	Ancaster	2			2
	Dundas	4			4
	Hamilton	77	15	7	99
	Saltfleet	5			5
	Stoney Creek	2			2
	Total	90	15	7	112
1972	Ancaster	3			3
	Dundas	4			4
	Hamilton	86	15	7	108
	Saltfleet	7			7
	Stoney Creek	2			2
	Total	102	15	7	124
1975	Hamilton- Wentworth	123	16	8	147
1976	Hamilton Wentworth	133	16	9	158
1977	Hamilton- Wentworth	144	16	12	172

Source:     Same as Table 40.



TABLE 42      NUMBER OF VEHICLES AND TYPES, FOR SELECTED YEARS

Year	Uniform	Plain	Station Wagons	Vans/Patrol Wagons	Others/ Undercover	Solo Motorcycles	Service Cars	Total
1974	64	45	5	5	9	12	4	144
1975	64	48	6	5	8	12	4	147
1976	69	52	6	6	9	12	4	158
1977	78	54	6	6	12 <sup>1</sup>	12	4	172

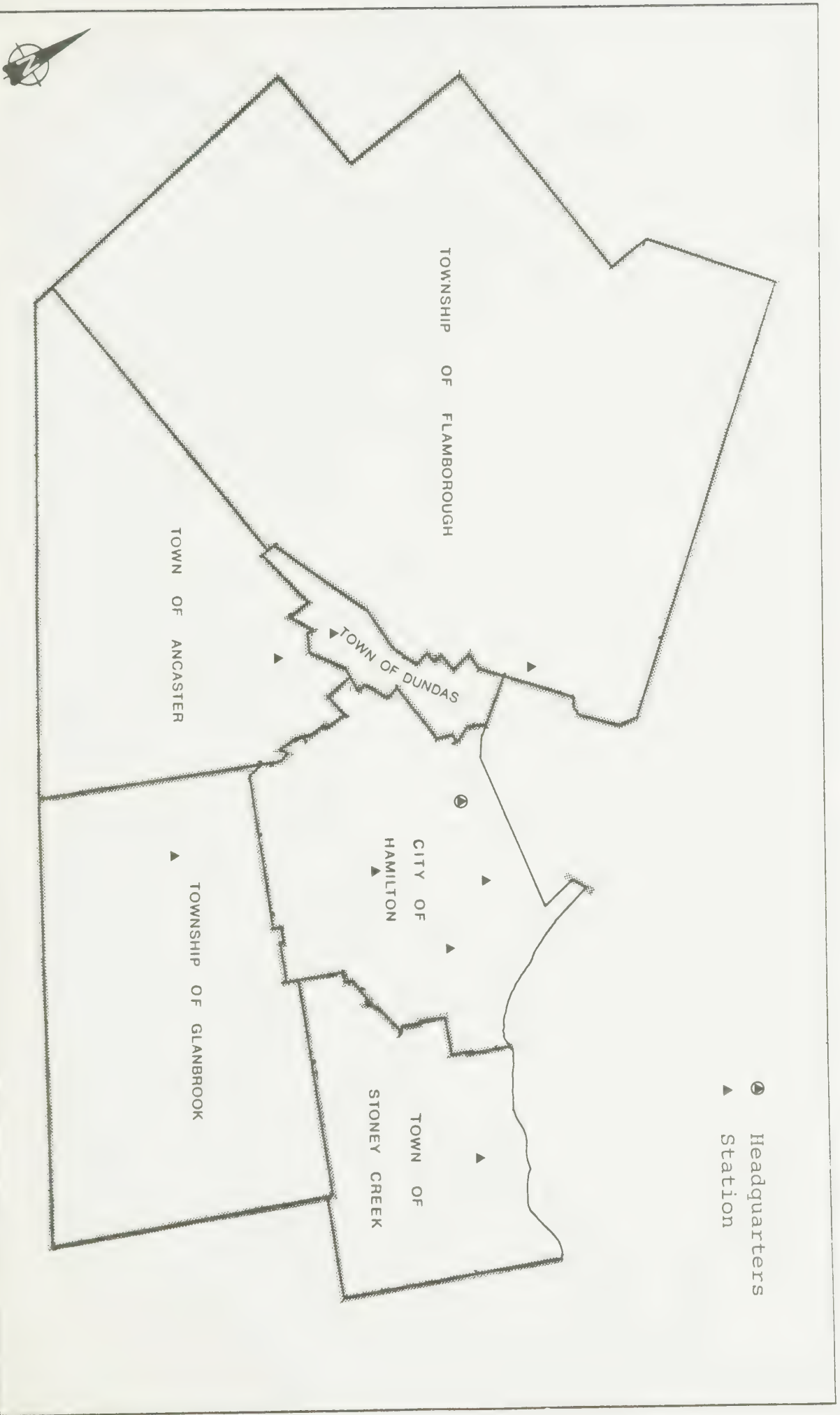
1    This figure includes 1 bomb truck, 1 trailer, 1 bus, 1 mobile home, 1 pick-up truck,  
7 undercover

Source:      Same as Table 41.



MAP 4

HAMILTON-WENTWORTH REGIONAL POLICE - HEADQUARTERS AND STATION LOCATIONS





## Personnel

The key resource as far as policing is concerned is manpower, its deployment and its utilization.

Complement data for selected years prior to regionalization clearly indicate that the area municipal forces varied considerably in terms of their rank structure and size (see Table 43). The Hamilton force was by far the largest and, for certain special services, served as a resource bank for the other area municipal forces - a fact often overlooked by critics of regional policing. The table also indicates that with some of the area municipal forces the ratio of commissioned officers to non-commissioned officers was high. In this pre-regional period most of the growth took place in the Hamilton force but given its size in comparison to other forces, this is not surprising. Generally speaking and except in Dundas, growth in this period was moderate and concentrated in the operations section of the various forces.

In the period since regionalization, growth has been more pronounced, reflecting primarily the increase in geographical areas of responsibility. Most of the growth has taken place in the operations section of the force (see Tables 44, 45, 46) particularly in the patrol areas. For example, in 1977 almost all of the increase can be attributed to the Region assuming responsibility for policing in Glanbrook and Flamborough. However, there has been little significant change in the ratio of unsworn personnel to police personnel and the ratio of police to population (see Table 47).

Complement can also be related to function (see Table 48) though such an exercise is difficult because of spillover effects. While it can be stated that so many man-years were devoted to the Traffic Division this provides no indication of how many man-years or parts thereof of the patrol personnel were consumed by traffic or traffic-related matters. This is true for a variety of other police functions as well (e.g., crime prevention and youth work) and a detailed and sophisticated analysis of the distribution of personnel by police function is virtually unattainable. Despite these limitations, some trends may be apparent. For example, since 1968 there has been a marginal increase in the percentage of man-years directly allocated to the patrol function. In C.I.D. the proportion has remained fairly steady. For Traffic there has been a marginal decrease. In the case of communications, the proportion of man-years allocated since regionalization has remained steady. Finally, there has been a marginal increase in the proportion of man-years consumed by unsworn personnel. Insofar as tentative conclusions may be drawn from these findings, they merely suggest that there have been no dramatic qualitative changes in policing or criminal activity in the Region in recent years.





TABLE 43 RANK STRUCTURE OF AREA MUNICIPAL FORCES, 1968, 1972, AUTHORIZED PERSONNEL

Rank	Municipality									
	Ancaster		Dundas		Hamilton		Saltfleet		Stoney Creek	
	1968	1972	1968	1972	1968	1972	1968	1972	1968	1972
Chief	1	1	1	1	1	1	1	1	1	1
Deputy Chief					1	1				
Ass't Chief					2	2				
Inspector				1	7	6		1		
Lieutenant					17	17				
Staff Sergeant					12	17	1			
Sergeant			1	5	94	107	1	4	1	1
Detective			2				1	1		
Corporal	1	2								
Constable	8	9	15	13	299	341	11	15	6	6
Police Women						8				
Probationary	1	1			7		2			
Police Cadets <sup>1</sup>						29		15		
Total	11	13	19	20	440	508	17	22	8	8

<sup>1</sup> Police Cadets are not included in total.



TABLE 44 POLICE PERSONNEL, ASSIGNED STRENGTH, IN THE HAMILTON-WENTWORTH REGION

	Police			Civilians		
	Administration	Operations	Total	Administration	Operations	Total
1968 (Jan. 8) <sup>1</sup>	46	393	439	56	8	64
1972 (Jan. 2) <sup>1</sup>	54	427	481	66	10	76
1975 (Jan. 5)	78	514	592	90	10	100
1976 (Jan. 4)	81	519	600	92	11	103
1977 (Sept.1)	82	580	662	100	17	117
1 1968 and 1972 figures are for City of Hamilton only.						

Source: Calculated from data provided by H.W.R.P.



TABLE 45                      DISTRIBUTION OF UNIFORMED PERSONNEL 1974-1977

Police	6 Jan. 74	5 Jan. 75	4 Jan. 76	1 Sept. 77	
Chief & Exec	2	2	2	2	
Adm D/C & Exec	2	2	2	2	
Records	5	6	6	6	
Summons	8	8	8	7	
Property	3	3	3	3	
Courts	6	5	7	9	(ADMINISTRATION)
Transport	1	1	1	1	
Support Serv	2	2	2	1	
Identification	15	15	15	15	
Communications	23	25	27	27	
Management Serv	3	3	4	4	
Adm. Serv	3	6	4	5	
Total	73	78	81	82	
Ops D/C & Exec	2	2	3	2	
Youth	19	20	20	21	
Spec Serv	31	33	34	34	
CID	68	69	70	74	
Pl Comd	5	5	5	4	(OPERATIONS)
Traffic	40	39	40	37	
Area #1	159	165	166	187	
Area #2	125	126	125	143	
Area #3	61	55	56	78	
Total	510	514	519	580	

NOTE: The figures reflected in this report deal only with assigned strength. They in many cases do not reflect authorized strength and should not be confused as being so.

Source: Hamilton-Wentworth Regional Police.



TABLE 46                    DISTRIBUTION OF CIVILIAN PERSONNEL 1974-1977

Civilians	6 Jan. 74	5 Jan. 75	4 Jan. 76	1 Sept. 77
Chief & Exec	2	2	2	2
Adm D/C & Exec	1	1	1	1
Records	47	49	53	53
Property	1	1	1	1
Courts	1	1	1	1
Transport	9	9	9	9
Identification	3	3	3	4
Communications	18	16	12	20
Management Serv	1	1	1	2
Maintenance	9	7	9	7
Ops D/C & Exec	1	1	1	1
Youth	2	3	3	2
Spec Serv			1	1
Area #1	1	1	1	8
Area #2	2	2	2	2
Area #3	1	1	1	1
CID	1	2	2	2
Total	100	100	103	117

NOTE: The figures reflected in this report deal only with assigned strength. They in many cases do not reflect authorized strength and should not be confused as being so.

Source: Same as Table 45.





TABLE 47                      COMPLEMENT DATA, AUTHORIZED STRENGTH,  
REGIONAL POLICE

	1975	1976	1977
Police Officers	607	660 <sup>1</sup>	666 <sup>2</sup>
Civilian Employees <sup>3</sup>	107	108	124
Ratio of Civilians to Police	1/5.67	1/6.11	1/5.37
Police per 1000 People	1.62	1.61	1.62
Ratio of Police to Population	1/619	1/620	1/618

1 Includes 4 officers at Mt. Hope Airport paid by the Government of Canada.

2 Includes 2 officers seconded to Ontario Police Commission.

3 Includes full-time staff only. Part-time personnel total 7.

Source: Calculated from data received from H.W.R.P. and the Regional Planning and Development Department.



TABLE 48                      ALLOCATION OF MAN YEARS AMONG DIFFERENT TYPES  
OF POLICE WORK FOR SELECTED YEARS

Functions	1977	1976	1975	1974	1972*	1968*
#1 Patrol Div.	186(8)	181(1)	164	160(1)	156	136
#2 Patrol Div.	142(2)	150(2)	126(2)	125(2)	87	79
#3 Patrol Div.	77(2)	61(2)	55(2)	61(2)	39(1)	33(1)
Traffic Div.	37	39	39	40	35	33
CID	76(2)	72(2)	71(2)	68(1)	62(2)	49(2)
Intelligence	8	5	5	5	6	3
Vice Section	18(1)	18(1)	17(1)	16	13	10
Crime Prev. Section	9	9	9	9	6	1
Platoon Comm.	4	4	5	5	4	6
Youth Div.	22(2)	21(2)	20(3)	19(1)	23+	22+
Comm. Centre	26(20)	23(9)	23(19)	23(19)	14(6)	12(4)
Ident. Branch	15(4)	15(3)	15(3)	15(3)	13(2)	10(1)
Transport Branch	1(9)	1(9)	1(9)	1(9)	1(8)	1(8)
Bldg. Maint. Branch	(7)	(7)	(7)	(7)	(6)	(6)
Aux. Police	1	1	1	1	1	1
Personnel	2(1)	2(1)	1(1)	1(1)	1(1)	1(1)
Complaint Branch	1	1	1	1	-	-
Graphics Branch	(5)	(5)	(5)	(4)	(3)	(3)
Records Section	13(49)	13(49)	13(45)	14(43)	10(41)	8(33)
Property Branch	3(1)	3(1)	3	3	2(1)	3(1)
Courts Branch	10(1)	8(1)	6(1)	6(1)	7(1)	5(1)
Training Section	2	-	4	1	2	2
Plan/Res. Branch	2	2	2	2	-	-
Systems Analyst	(1)	-	-	-	-	-
Total	655(115)	629(95)	581(100)	576(94)	482(72)	415(61)
<u>Equipment</u>						
Vehicles	172	158	147	144	112	106

+ Including Juvenile, Domestic, Safety and Sherman Station  
(1974, 4 Assault and Domestic Investigators transferred to  
CID responsibility).

( ) Unsworn personnel

\* CITY OF HAMILTON ONLY

All figures are optimum counts during peak periods of each year and  
may not correspond with each January 1st personnel assignment order.

Source: Same as Table 46.



## Finances

Policing is personnel-intensive and in recent years its cost has risen substantially. Salaries increased markedly between 1968 and 1972 (see Table 49) and, not surprisingly, have continued their upward climb since the formation of the H.W.R.P. (see Table 50). Levelling up is probably unavoidable in regionalization and certainly occurred to some extent in policing in Hamilton-Wentworth. As Table 51 shows, during the period 1966 to 1977, gross expenditures expressed in current dollars have more than quadrupled.

When gross expenditures are analyzed on a per capita basis, the results are interesting (see Table 52). The same rapid increase in costs is revealed but with a somewhat lower than average rate of increase in Flamborough and Glanbrook. For the years 1972 to 1975, per capita costs for Hamilton and the suburban municipalities increased by over 50% while in Flamborough policing costs rose by approximately 48%. In Glanbrook, for the same period, costs increased by approximately 43%. For the one-year period 1975 to 1976, in Hamilton and the suburban municipalities policing costs rose by 25%, in Flamborough by approximately 6.5% and in Glanbrook by approximately 9%. It seems clear that in the period under examination O.P.P. costs were rising at a more moderate pace than those of the H.W.R.P. This somewhat contentious finding might be explained by differences between the two forces in their organizational structures and in their methods of delivering certain specialized services.

The H.W.R.P. is currently implementing a program budgeting system but as yet there is no satisfactory method of examining costs in terms of policing activity. Naturally the force is aware of its costs and is concerned about them. Table 53 contains figures prepared by the H.W.R.P. It shows that the highest gross increases have been in salaries, benefits and building costs. The highest percentage increases have been in the same three items and in communications costs.

Table 54 compares the costs of policing in Hamilton-Wentworth with those of the Niagara, Ottawa-Carleton and Waterloo regions in 1975 and 1976. It shows Hamilton-Wentworth as having had the highest cost per \$1000 of equalized assessment in 1976 and the second highest in 1975. Hamilton-Wentworth's per capita costs were the highest of the four regions in both years. Hamilton-Wentworth has the second lowest police to population ratio of the four regions and this partly explains its relatively high costs. Other contributing factors include the debt retirement costs of the new headquarters and, in the latter part of 1976, the expense of gearing up for the take-over of policing in Flamborough and Glanbrook.

While policing costs have been rising steadily it is clear that provincial grants for policing have not been



TABLE 49 SALARY STRUCTURE OF AREA MUNICIPAL FORCES, 1968, 1972\*

Rank	Municipality									
	Ancaster 1968	Ancaster 1972	Dundas 1968	Dundas 1972	Hamilton 1968	Hamilton 1972	Saltfleet 1968	Saltfleet 1972	Stoney 1968	Creek 1972
Chief	9,240	13,500 (1971)	8,640 (1967)	16,400	19,100	25,659	10,350	18,200 (1971)	8,330	13,000 (1971)
Dep. Chief					14,600	20,096				
Ass't Chief					13,800	18,906				
Inspector				13,650	10,891	17,150		15,648		
Lieutenant					9,339	15,879				
Staff Sergeant <sup>1</sup>					8,926	14,702	8,305			
Sergeant			7,861	12,650	8,100	13,614	7,296	13,416		
Detective			7,861				7,296	13,416		
Corporal	7,679	11,867								
Constable	6,799	11,241	6,673	11,550	6,730	11,672	5,915	11,500	6,921	10,340

\* Does not include benefits.

<sup>1</sup> Salary figures for Sergeant and Constable represent the range from the low end of the scale to the top end for that position.





TABLE 50                      SALARY & RANK STRUCTURE, HAMILTON-WENTWORTH  
REGIONAL POLICE, FOR SELECTED YEARS

Rank	1974 \$	1975 \$	1976 \$	1977 \$
Chief	32,000	39,000	41,184	43,655
Deputy Chief	27,000	32,000	34,184	36,235
Staff Superintendent	23,804	28,175	30,457	32,634
Superintendent	22,040	26,088	28,200	30,217
Staff Inspector	20,408	24,155	26,112	27,978
Inspector	18,896	22,366	24,178	25,906
Staff Sergeant	17,496	20,709	22,386	23,987
Sergeant, 1st Class	16,200	19,175	20,729	22,210
Sergeant, 2nd Class	15,000	17,755	19,193	20,565
Constables, 1st Class	13,889	16,440	17,772	19,042
Constables, 2nd Class	13,122	15,532	16,790	17,210
Constables, 3rd Class	12,372	14,644	15,831	16,227
Constables, 4th Class	11,614	13,746	14,860	14,860

Source:     Hamilton-Wentworth Regional Police.



TABLE 51 GROSS EXPENDITURES FOR POLICING

Municipality	1966 \$	1972 \$	1975 \$	1976 \$	1977 \$
Ancaster	82,333	214,868			
Dundas	159,965	363,026			
Hamilton	3,972,920	8,631,101			
Saltfleet	111,232	407,716			
Stoney Creek	55,709	144,527			
Regional Sub-Total	4,382,159	9,761,238	15,367,437	19,371,306 <sup>1</sup>	23,023,910 <sup>2</sup>
O.P.P. Jurisdiction					
a. Flamborough	N.A.	284,043*	420,070*	452,691*	123,491*
b. Glanbrook	N.A.	216,171* <sup>3</sup>	309,945*	338,165*	73,394*
Total		10,261,452	16,097,452	20,162,167	23,220,710

\*Estimate

<sup>1</sup>Includes cost (\$142,917) of setting up process for assuming responsibility for policing in Flamborough and Glanbrook.

<sup>2</sup>Includes cost (\$901,923 est.) of policing in Flamborough and Glanbrook.

<sup>3</sup>Mileage costs have been proportioned 60% highway, 40% general duties.

Sources: (1) Hamilton Burlington Wentworth Local Government Review Data Book; (2) Information provided by Hamilton-Wentworth Regional Finance Department; (3) Information provided by Ontario Provincial Police; (4) Information provided by H.W.R.P.



TABLE 52 POLICE COSTS PER CAPITA, IN HAMILTON-WENTWORTH, 1966, 1972, 1975-77

Municipality	1966 \$	1972 \$	1975 \$	1976 \$	1977 \$
Ancaster	5.50	14.30			
Dundas	10.32	20.91			
Hamilton	13.33	28.36			
Saltfleet	6.18	20.68			
Stoney Creek	7.69	17.09			
Regional Sub-Total	12.39	26.75	40.92	51.15 <sup>1</sup>	58.61 <sup>2</sup>
O.P.P. Jurisdiction					
a. Flamborough	N.A.	12.42	18.37	19.38 <sup>4</sup>	
b. Glanbrook	N.A.	21.55	30.82	33.66 <sup>3</sup>	32.40 <sup>5</sup>
Total		25.83	39.41	49.26	56.45

<sup>1</sup>Excludes cost to Region of moving in to Flamborough and Glanbrook.

<sup>2</sup>Excludes cost of Policing in Flamborough and Glanbrook.

<sup>3</sup>When additional H.W.R.P. costs (\$142,917) are added to Glanbrook on a pro-rated basis the per capita cost of policing (O.P.P. total plus 30.07% of H.W.R.P. expenditure of \$42,975) is \$37.94.

<sup>4</sup>When additional H.W.R.P. costs (\$142,917) are added to Flamborough on a pro-rated basis, the per capita cost of policing (O.P.P. total plus 69.3% of H.W.R.P. expenditure of \$99,942) is \$23.65.

<sup>5</sup>This figure is arrived at by adding estimated H.W.R.P. costs in the Flamborough-Glanbrook area plus O.P.P. costs for the first quarter of 1977.

Sources: (1) Hamilton Burlington Wentworth Local Government Review Data Book; (2) Hamilton-Wentworth Regional Finance Department; (3) Ontario Provincial Police; (4) Information provided by Regional Planning and Development Department; (5) Information provided by the Town of Stoney Creek; (6) Information provided by H.W.R.P.



TABLE 53 MAJOR AREAS OF COST INCREASES, HAMILTON-WENTWORTH REGIONAL POLICE  
FOR SELECTED YEARS

	1974 Actual	1975 Actual	1976 Actual	1977 Estimate	Increase Est. 1977 over 1974 Actual Amount	%
	\$	\$	\$	\$	\$	%
Police Commission	15,246	24,242	20,657	20,000	4,754	31.2
Salaries	9,925,082	12,073,747	13,559,968	15,294,370	5,369,288	54.1
Benefits	1,292,131	1,712,704	2,221,408	2,638,760	1,346,629	104.2
H.M.R.F. Deficiency	-	-	840,878	2,549,699	2,549,699	-
Building Costs	232,207	238,038	1,274,078	1,757,380	1,525,173	656.8
Motor Vehicle Operations	683,995	743,268	737,725	1,081,800	397,805	58.2
Uniforms, Clothing & Accessories	181,578	237,127	244,935	349,620	168,042	92.5
Communications System	103,837	155,280	258,351	374,310	270,473	260.5
Other Operating Costs	188,291	235,086	269,775	401,470	213,179	113.2
Court Officer's Salaries	32,537	37,039	45,596	46,000	13,463	41.4
Beach Rescue Unit	4,000	4,000	11,500	5,200		30.0
TOTAL GROSS COST	12,658,904	15,460,531	19,484,871	24,518,609	11,859,705	93.7

Source: Hamilton-Wentworth Regional Police.





TABLE 54 COMPARATIVE COSTS OF POLICING, 1975 and 1976

Municipality	Police Budget per \$1000. Eq. Ass.	Pop.	1975					Total Force Personnel	Force/Pop. Index	Per Capita Cost
			Actual Police Strength	Police/Pop. Index	Civ. Strength					
Hamilton-Wentworth	\$4.22	372,050	607	1/613	107		714	1/521		\$41.46
Niagara	3.84	354,785	478	1/742	91		569	1/624		33.00
Ottawa-Carleton <sup>1</sup>	4.24	441,005	758	1/582	176		934	1/472		37.27
Waterloo	3.99	286,281	412	1/695	84		496	1/577		35.32

1976

Hamilton-Wentworth	4.88	408,466	660	1/620	108		768	1/555		45.09
Niagara	4.28	360,127	485	1/743	94		579	1/622		37.63
Ottawa-Carleton <sup>1</sup>	4.83	455,219	770	1/591	200		970	1/469		42.77
Waterloo	4.16	286,281	415	1/690	82		497	1/576		38.77

<sup>1</sup>Ottawa totals were arrived at by combining the figures for Ottawa, Vanier, Gloucester Township and Nepean Township and do not include the contractual arrangement between Rockcliffe Park and the O.P.P.

Source: Ontario Police Commission.



rising at a commensurate rate (see Table 55). In fact in the period 1975-1977 the provincial per capita grants as a percentage of total police expenditures declined significantly (see Table 56). Grant increases have not kept pace with cost increases but then this might not have been their intent. The grants are paid on a per capita basis, without any automatic escalation adjustment and perhaps therefore are not expected to cover a consistent proportion of total policing costs.

The figures contained in Tables 51-54 are hardly conclusive. While they show that policing costs in Hamilton-Wentworth have risen considerably over the years and are relatively high, they do not show that they are too high - merely a cause for continuing concern. Amalgamation caused increases and so also did the O.P.P.'s withdrawal from Flamborough and Glanbrook. Disregarding the question of how efficient the H.W.R.P. is, what has transpired is that the cost of policing has become more and more a responsibility of local government rather than the provincial government and thus is financed by the property tax system rather than by the provincial tax system.

### Issues

Any review of policing or a police department conducted in Ontario at this time will tend to focus on a standard set of likely issues. These include complaint procedures, the ethnic and sexual composition of the force, private security services, the use of civilians in the force, community relations, levels of service, costs and accountability. Our review of policing in Hamilton-Wentworth suggests that some of these matters are not at present contentious within the Region. They are, however, worth noting briefly.

- \* The complaints procedure appears satisfactory in that it is clearly understood by members of the H.W.R.P. and offers both the police officer and the citizen a reasonable degree of protection. The present procedure is not (by itself and because of any inadequacy) a powerful argument in favour of establishing a civilian complaints board.
- \* The ethnic and sexual composition of the H.W.R.P. appears to present no problems. Ethnic representation on the force seems to be generally consistent with that of the community at large and the Community Services Resource Branch maintains liaison with ethnic organizations in the Region. The H.W.R.P. also has female staff, including uniformed personnel.
- \* Officials of the H.W.R.P. stated that there were no difficulties with private security firms. These have grown in recent years in Hamilton-Wentworth as elsewhere in the province but the H.W.R.P. is both aware of their activities and also maintains close contact



TABLE 55      PER CAPITA GRANTS - POLICE

Municipality	1975 (12.00) \$	1976 (12.00) \$	1977 (15.00) \$
Ancaster	171,552	172,008	212,700
Dundas	227,004	231,780	288,180
Flamborough	269,484	274,356	350,460
Glanbrook	120,096	120,684	150,705
Hamilton	3,674,448	3,742,632	4,682,430
Stoney Creek	351,372	360,132	455,490
TOTAL	4,813,956	4,901,592	6,139,965

Source:      Regional Finance Department



TABLE 56      PER CAPITA PROVINCIAL GRANTS AS A  
PERCENTAGE OF POLICE EXPENDITURES

Year	Per Capita Grant \$	Police Expenditures \$	Grants as % of Expenditures
1975	4,813,956	15,460,531	31.40
1976	4,901,592	19,484,871	25.16
% increase 1976/75	1.82	26.03	
1977	6,139,965	24,518,609*	25.04
% increase 1977/76	25.26	25.83	

\* Figures for 1977 are an estimate.

Source:      Calculated from data provided by the Regional  
Finance Dept.





with them. Similarly, H.W.R.P. relationships with the Harbour Police, the McMaster University security force as well as, of course, the O.P.P. are reported as satisfactory.

- \* Strong arguments are made in favour of employing more civilians on police forces on the grounds of both economy and also avoidance of the problems of underemploying highly trained police officers. Civilians can undertake certain types of work in communications, stores and supplies, administration and even areas such as criminal identification. The H.W.R.P. is aware of the desirability of employing more civilians in certain positions and is slowly adding them to the force. Caution is recognized as necessary. Adequate training and supervision of civilian personnel are essential and any rapid influx of civilians would probably be damaging to morale and would certainly be resisted by the Police Association of Ontario. Provided progress continues to be made this matter should not become an issue in the H.W.R.P.

The "non-issues" summarized above are not, in the minds of most people, associated with regionalization. The issues of concern, however, generally are. The benefits of an amalgamated department - principally improved responsiveness, improved training and the wider application of specialized services - are readily apparent but actual and potential issues remain. These are related to levels of service, costs, control and accountability. They are pervasive and are well illustrated by the short case study contained in Appendix B, which describes the extension of regional policing to Flamborough and Glanbrook and which demonstrates some aspects of three interrelated matters:

#### Rotation of Patrol Personnel

Public concern has been expressed that patrol personnel are rotated too frequently. To understand this concern, it is necessary to understand the present rotation system for patrol purposes. Hamilton-Wentworth has been divided into three areas (see Map 3). #3 Patrol Area consists of the Mountain, Ancaster and Glanbrook. An officer on the rotation system will spend three weeks in Ancaster, three weeks on the Mountain and three weeks in Glanbrook. The cycle is thus one of nine weeks. In #1 Patrol Area, which extends westward from the city core to Dundas and Flamborough, there is a variation to this procedure: a three-week rotation is used but only between the Dundas and Flamborough personnel. In #2 Patrol Area the three-week rotation system is used as it is in #3 Patrol Area. The difference between the #1 Patrol Area and the other two is explained by the H.W.R.P. on the grounds that Flamborough is large and also requires a distinctive degree of "rural policing".



Complaints about rotation centre on the charge that police officers are being moved too frequently to get to know the communities they are policing. The rejoinder to this argument is that the system has been in effect for sufficient time to allow police officers to familiarize themselves with outlying districts. It is also suggested that rotation permits a greater number of patrol personnel to become familiar with different districts and that this could be valuable if extra, outside personnel had to be called into any community in an emergency. There are also other objections to permanent postings. It is sometimes suggested that police-citizen familiarity can breed contempt and corruption and, in addition, that the permanent or long-term stationing of police personnel in rural districts would be damaging to their morale, weaken their career opportunities and divide a department into two forces: urban and rural.

Such arguments appear to be valid but, of course, require close examination. Familiarity can present problems. However, these tend to occur in small forces rather than in forces the size of the H.W.R.P. which is not particularly susceptible to political or public pressure. Being members of the H.W.R.P. should enable police officers to maintain the necessary psychological distance between themselves and the public in rural communities. Concerns about the negative effects on morale, on career opportunities and the dangers of a department being split in two carry weight but primarily if the postings are either permanent or of extremely long duration -- but hardly to postings of, say, three months.

It must be stressed that we, unlike the public, are not being critical of the three week rotation system at present being used. We would have no basis for doing so because, while there is clearly nothing magical about the figure of three weeks, no better time period can be suggested or supported with empirical evidence. In a simple rotation system no matter how much frequency is changed, duration remains the same! However, qualitative change is always possible and what can be suggested is that the H.W.R.P. consider undertaking further analysis of its patrol system with a view to making changes to it. A staggered rotation system, for example, might offer the advantage of continuity in police-community contact without in any way reducing the movement of the individual officer. If the Region's development plan is accurate, a significant proportion of Hamilton-Wentworth can be expected to remain rural and there will, therefore, be a continuing need for effective "rural policing".

#### Levels of Service and Costs

Both the examination of the extension of services to Flamborough and Glanbrook and that of patrol rotation indicate how difficult it is to come to grips with the concept of level of policing service. Definition is lacking and measurement is crude. One has only to reflect on the



fact that in many situations the better and greater the volume of policing, the more crime there is reported to realize how questionable it can be to use criminal statistics to justify resource allocation. Yet negative measures of public safety and measures of the resources themselves are still the best indicators of service available.

For what they are worth, these measures suggest that there are no general deficiencies in Hamilton-Wentworth in the level of policing service. There is a high ratio of police personnel to population in the Region and a high ratio of police personnel to equalized assessment. Occurrence and clearance rates are similar to those in other parts of the province and the H.W.R.P. offers the range of special services one would expect from a department of its size. Clearly, the H.W.R.P. aims to provide a high and uniform level of service throughout the Region and is succeeding in doing so.

But is it too high or at least too uniform? Critics of the H.W.R.P. suggest that it gives only partial recognition to the differences between "urban" and "rural policing" and that it is providing unnecessary "urban" services in rural areas rather than "rural policing" which is both more effective and cheaper.

If this allegation is warranted, the cost implications alone are cause for concern. Policing is expensive and, particularly in a time of financial crisis, it behooves municipalities and other government bodies to ensure that maximum benefit is obtained for expenditure of every dollar provided by the tax-payer. This requires not only effective budgeting and expenditure procedures but also clear priorities, tight control and fiscal accountability.

### Control and Accountability

Questions of control and accountability in policing are contentious. As has been indicated earlier in this report, policing is essentially a provincial matter. The Province formulates policing policy, designs the basic program and sets standards. The service itself is delivered locally, not by a regional or area municipality but by a distinctly separate police department which reports to its own separate board of commissioners. This board is less a local government special purpose body than it is an agency of the Province. It is accountable to the Province, through the Ontario Police Commission, more so than it is accountable locally. The primary role of local government in policing is that of funding. This situation applies throughout Ontario, including in Hamilton-Wentworth.

Is this satisfactory? The argument in favour of it is based primarily on the belief that "politics should be kept out" of policing. By "politics" is meant patronage, graft





and corruption - not the democratic process of decision making by elected representatives - and there is plenty of evidence from other jurisdictions to support the notion that politics and policing do not mix to the benefit of most citizens.

The argument against the present arrangement can probably be best and most simply stated by saying that politics - the better sort - are what government is all about, including the governing of police departments. Currently, local control over policing is weak and accountability is diffused. Regional council does not have final authority for the approval of the largest single item in its budget, an item which represents a service of considerable importance to the community. This is hardly consistent with democratic values. Furthermore, the present system might not even provide for very good decision-making given that it does not encourage responsible behaviour by any of the bodies involved.

The people of Hamilton-Wentworth have a choice. If they understand the issues, if they understand how their police are governed at present and if they are content then clearly they should accept the status quo. If not, they can ask the Province to consider making some adjustments so as to provide local government with more control over policing. If they succeed, local government will not only have more control; it will have more accountability.

### Options

#### A Return to the City/County System

The abolition of regional government would have a drastic impact on policing. In the first place policing would likely become a local responsibility. It is problematic whether special statutory provision would be made to maintain an area-wide force. Moreover, given the existence of different policing needs on certain area municipalities the end of a regional force might precipitate a re-evaluation of policing arrangements. For example, a rural municipality such as Flamborough might contract for policing services with the O.P.P. or a force in an adjacent municipality. Given the dislocation caused by the dismantling of the Region, it is highly unlikely that a regional police force would be maintained.

There are, however, no apparent statutory impediments to the continuance of a regional/county force or the establishment of a force to serve two or more municipalities under this option. Section 56(2) of The Police Act provides for the amalgamation of municipal forces while section 352, paragraph five of The Municipal Act provides for the joint provision of policing services. Anything other than an area-wide force would result in a further fragmentation of the local government





system, thereby weakening the lines of political accountability and increasing unduly the complexity of the system.

One conceivable scenario here is the existence of separate forces in Hamilton, Ancaster, Dundas and Stoney Creek, and contract policing by the O.P.P. in Glanbrook and Flamborough. The Hamilton police force would likely maintain all of the specialized services currently employed by the H.W.R.P. In fact, regionalization appears to have had no impact on the development of specialized services by the H.W.R.P.; that is to say, the existing department does not have any services which the former city department either had or would have had by this point. A return to policing as a local responsibility would probably put the Hamilton force in the role of resource provider for the smaller forces, a role which it played to some extent prior to 1974. It is unlikely that the suburban forces would have the resources to provide on an individual basis such specialized services as anti-rackets, vice, criminal intelligence and drug enforcement. These services would either be purchased from the Hamilton force or be provided by the headquarters staff of the O.P.P. The latter alternative, of course, would involve the subsidizing of an element of police operations in Ancaster, Dundas and Stoney Creek by the tax-payers of the province. Finally, there might be some merit in retaining the centralized communications and records systems of the H.W.R.P. This proposed cooperation would have to be formalized by means of an inter-municipal agreement.

The situation in Glanbrook and Flamborough would be somewhat more complex. It is extremely unlikely that either municipality could finance its own police force given their current assessment bases. In addition, it is questionable whether either the suburban or Hamilton forces would be willing to police these municipalities under contract. Such an arrangement would create profound resource and logistical problems for the force providing the service. The most likely development would be a contractual arrangement between the O.P.P. and Glanbrook and Flamborough, respectively. The O.P.P. have estimated that it would cost approximately \$700,000 to police both municipalities under contract. This cost figure includes the retention of a facility formerly used in Flamborough but it does not provide for the construction of a new facility in Glanbrook (prior to April, 1977 Glanbrook was serviced by the O.P.P. detachment in Burlington).

So far the impact of implementing this option has been analysed from the perspective of the individual municipal units concerned. What would be the effect on police personnel? Clearly, there would be a reduction in the number of personnel overall. This assumes, of course, that Glanbrook and Flamborough would be policed by the O.P.P. In addition, there might be adverse effects on morale and hence effectiveness. Many of the officers who served on local forces prior to 1974 as well as those who have joined the regional force since then view the H.W.R.P. as a vehicle of career professionalization. The dismantling of the regional force would create several smaller forces in which the variety of opportunities for career enrichment and advancement would be much less.



This option also has several important consequences for the structure of local government in Hamilton-Wentworth. First, the Board of Commissioners of Police, a regional special purpose body, would cease to exist. In its place would be local police boards in Hamilton, Ancaster, Dundas and Stoney Creek. This may mean greater local control of policing but it also increases the number of special purpose bodies at the municipal level thereby contributing to the fragmentation and complexity of the overall system. Furthermore, the existence of four governing authorities would make the approval of cooperative activities (e.g., communications, training) among the four departments a cumbersome process. Second, O.P.P. policing in Glanbrook and Flamborough would not require the existence of local boards and thus policing decisions would become (as they were before April, 1977) a matter of intergovernmental relations, i.e., between a local council and a provincial agency.

#### A Single-Tier Region

Policing in Hamilton-Wentworth is currently a regional function. Therefore, there do not appear to be any significant implications for policing under this option.

#### Six Single-Tier Municipalities

The implications of this option for policing are similar to those discussed with regard to a return to the city/county system.

#### An Enlarged City with the Remainder of the Region Formed into a County System or Annexed to Adjacent Regions or Counties

Under this option it is assumed that an enlarged City of Hamilton would include the built-up areas of Ancaster, Dundas and Stoney Creek. This new municipality would have sufficient resources to provide a uniform level of policing within its territory. The remainder of the existing Region which would be primarily rural is probably neither viable as a county system nor does it contain sufficient fiscal resources to provide effective police services either on a local or county basis. Also, it should be noted that current provincial policy would tend to support the formation of a county force. Despite provincial policy the most viable option for the rural municipalities of the new county would be an agreement with the O.P.P.

The annexation of these rural areas to adjacent regions and counties is more problematic. The eastern part of Stoney Creek might become part of the Niagara Region and therefore it would be policed by the regional force there. In the case of some of the other municipalities several possibilities exist. The rural part of Ancaster and all or most of Glanbrook might be annexed by the Regional Municipality



of Haldimand-Norfolk which has a regional force. This situation would probably have significant resource implications for the force in Haldimand-Norfolk. It is also conceivable that parts of Ancaster and Flamborough could be annexed by adjacent municipalities in Brant County which are currently policed by the O.P.P. Some parts of Flamborough might be annexed by Waterloo Region which maintains a regional force; others, by municipalities in Wellington County which receive O.P.P. policing. Finally, that part of Flamborough formerly known as East Flamborough could be annexed by Halton Region which also has a regional police force.

#### An Enlarged City and a Rural Single-Tier Municipality

The implications of this option are very similar to the previous one. One point which is worth repeating, however, is whether the assessment base of the rural unit could finance an adequate level of police services. If such a police force were established, it would probably rely on the city force for most of its specialized services.

#### Modifications to the Existing Two-Tier System

Implicit in the "Issues" section of this report are a number of recommendations which may improve the efficiency and effectiveness of regional policing. In any event policing should remain a regional responsibility.



APPENDICES





## APPENDIX A      LISTING OF PRIORITY CATEGORIES

---

<u>Priority</u>	<u>Activity</u>
1	Non-urgent call which can be deferred for a great length of time, e.g. going home from a hospital to convalesce
2	Non-urgent call but someone's schedule must be met, e.g. treatment schedule at hospital
3	Prompt call, delay could cause discomfort in patient, e.g. most limb fractures
4	Urgent or life-threatening call, e.g. car accident
5	Obvious death
6	Pronounced dead
7	Patient refuses to go
8	Standby
9	Maintenance of vehicle
10	Administrative call

---

Source:    Ambulance Services Branch, Ministry of Health



APPENDIX B            THE EXTENSION OF REGIONAL POLICING TO THE  
                         TOWNSHIPS OF FLAMBOROUGH AND GLANBROOK

After Regional policing went into operation on January 1, 1974 in Hamilton-Wentworth, the Ontario Provincial Police maintained responsibility for policing in the Townships of Flamborough and Glanbrook. At that time Glanbrook was serviced by the Burlington detachment of the O.P.P. while Flamborough was serviced by the Waterdown detachment.

The O.P.P. had been policing these areas since 1909 and, over the years, had acquired a reputation for providing effective and efficient rural policing. The deployment of O.P.P. personnel in these areas warrants brief examination. It is summarized in Table 57 which shows the number of O.P.P. officers in this area in the period prior to regionalization, together with their salary and rank structure. According to the O.P.P. the figure of 28 personnel represents the number involved in general duty policing. It does not include the number of police personnel involved in highway duties. This table permits comparison of O.P.P. rank and salary structures with those of the area municipal forces (see Tables 43 and 49). They are very similar.

Table 58 shows occurrence rates in the townships in the period before and after regionalization. They were low. In 1972 there was an average of 34.2 occurrences per police personnel per annum in Flamborough and Glanbrook. Following regionalization there was an increase in the number of incidences but this was consistent with that occurring in other outlying areas. While the number of police personnel remained the same in 1975 and 1976 as in 1972, the number of offences per police personnel per annum rose to 53.1 in 1975 and then declined slightly to 52.3 in 1976.

During these years, policy decisions were being made at the provincial level which were to have a radical effect on the O.P.P. role. In September, 1976 the Provincial Treasurer announced that, effective April 1, 1977 Hamilton-Wentworth and other regions would have to assume their full statutory policing responsibilities. This meant that the O.P.P. would only provide policing service on the provincial highways and that general duty policing would become the responsibility of the H.W.R.P. As a result of this announcement the H.W.R.P. was forced to change its earlier program for assuming policing responsibility in the area over a three to five year basis and develop new plans for the immediate expansion into the Flamborough and Glanbrook areas. These plans were based on research conducted by H.W.R.P. staff and extensive and extended discussions with Ontario Provincial Police personnel in the Waterdown detachment, Burlington detachment and the headquarters in Toronto. Previously, the H.W.R.P. in an internal report completed in 1975 had concluded that an additional 46 police personnel would be required by a move into Flamborough and Glanbrook.



TABLE 57 SALARY AND RANK STRUCTURE OF ONTARIO PROVINCIAL POLICE IN FLAMBOROUGH-GLANBROOK, 1968, 1972

Rank	Flamborough (Waterdown Detachment)		Glanbrook (Burlington Detachment)	
	1968	1972	1968	1972
Staff Sergeant	1	1		
Corporal	2	2	1	1
Constables	17	17	7	7
Total	20	20	8	8
Salary				
Staff Sergeant	\$8,900	\$14,258		
Corporal	7,900	12,562	\$7,900	\$12,562
Constable	7,300	11,505	7,300	11,505

Source: Ontario Provincial Police.



TABLE 58 O.P.P. CRIME STATISTICS AND CLEARANCE RATES, TOWNSHIP OF FLAMBOROUGH AND GLANBROOK, SELECTED YEARS

Offences	No.	1972	% Clearance	No.	1975	% Clearance	No.	1976	% Clearance
		Cleared by Charge or Other Means			Cleared by Charge or Other Means			Cleared by Charge or Other Means	
Assaults (not indecent)	65	55	79.7	102	87	85.3	125	72	57.6
Breaking and Entering	146	33	22.6	208	57	27.4	223	28	15.6
Theft: Motor Vehicle	25	6	24.0	59	23	39.0	62	19	30.6
Theft: Over \$200	23	2	8.7	87	17	19.5	106	18	17.0
Theft: Under \$200	183	28	15.3	269	53	19.7	309	42	13.6
Frauds	28	19	67.9	77	71	92.2	65	26	40.0
Liquor Acts	386	384	99.5	519	519	100.0	411	410	99.8
Motor Vehicle Claims Act	98	98	100.0	167	167	100.0	164	164	100.0
TOTAL	958	625	65.2	1488	994	66.8	1465	779	53.2

Source: Ontario Provincial Police.





The study undertaken in 1976 indicated a need for 49 police personnel to move into these areas. The Board of Commissioners of Police, at a meeting in September, 1976 approved the immediate hiring of 33 police personnel with the remaining 16 to be added in 1978. The 33 police personnel represented the minimum implementation proposal outlined by the force and was the maximum number that could be readied for April 1.

In February of 1977 the H.W.R.P. began their orientation program. The patrol officers began riding with O.P.P. personnel to acquaint themselves with the new territory. Senior police personnel undertook a tour of the new area to familiarize themselves with it. All households in the two townships received a mailing from the H.W.R.P. and crime prevention officers visited all businesses and commercial enterprises to apprise themselves of any special security needs. On April 1, 1977, the take-over became effective. The new areas were integrated into existing Patrol Areas with Flamborough added to Patrol Area #1 which already included Dundas and the western part of the City of Hamilton and Glanbrook was added to Patrol Area #3 which already included Ancaster and the Mountain portion of the City of Hamilton.

By September of 1977 the H.W.R.P. had evaluated the move into Flamborough and Glanbrook. The Chief of Police in a report to the Board, stated that the force would only require 6 additional police personnel rather than the 16 originally planned. At the present time, therefore, there are 39 police personnel attached to the Flamborough and Glanbrook sections of the Region, with 29 of those being patrol personnel. O.P.P. data suggest that these figures might be high. According to the O.P.P. it maintained a complement of 57 police personnel including special services, in the two townships from 1975 to 1977, of whom 28 were involved in general duties policing. This is eleven less than the 39 the H.W.R.P. actually has and 21 less than the H.W.R.P.'s estimated requirement - big differences indeed with both cost and service level implications.

Some of the variance can easily be accounted for. First, the O.P.P. is organized to deliver policing in a different manner. An O.P.P. constable performs certain functions which a constable in the H.W.R.P. does not perform but instead refers to specialists. Second, the withdrawal of the O.P.P. from general duties policing but not from highway policing means that there is now some under-utilization of O.P.P. personnel in the Region. While previously a highway patrol unit could also do some general duty policing while in the field, presently the H.W.R.P. must maintain patrols to do this work.

These two factors, however, do not account for all of the difference. An examination of level of activity further clouds the issue. As was mentioned previously the number of offences per annum per O.P.P. personnel in Flamborough and Glanbrook was 53.1 in 1975 and 52.3 in 1976. For 1977, if incidences reported by the O.P.P. up to April 3 are combined



with incidences reported by the H.W.R.P. to the end of December, the approximate total is 1,982. Thus, the average per annum for H.W.R.P. personnel is 50.8 which is much the same level of activity experienced by the O.P.P. (If the H.W.R.P. complement were the same as that of the O.P.P., the average would rise to 70.8.) In any event the level of activity seems low. Patrol personnel receive few calls per day and have relatively long periods of inactivity. Non-patrol personnel in these sections of the Region (doing, for example, C.I.D. and youth work) are kept well utilized only by being assigned to other parts of the Patrol Area. Given the existing levels of activity, the present police complement in Flamborough and Glanbrook could probably even assume the highway duties of the O.P.P. without the need for additional staff.

We can only conclude from our review that there was overestimation of the resources required to assume policing responsibility in Flamborough and Glanbrook. This is not a moral judgment and it is, of course, made with the advantage of hindsight. Furthermore, we have reached no conclusion as to why overestimation occurred. Policing critics might be tempted to think that Regional Council and the Board of Commissioners were negligent in permitting the H.W.R.P. to take advantage of the transition to enhance its resources unnecessarily. A less uncharitable explanation would be that the overestimation was simply caused by human error. Or that the H.W.R.P. wished to make quite certain that the level of service it provided was in no way inferior to that of its predecessor. These and other explanations are all possible, both singly and in combination. Regardless of the "true" explanation (and discovering it is probably not important at this time), it seems reasonable to conclude that, unless levels of criminal activity increase dramatically in Flamborough and Glanbrook, there is probably no need to add the additional ten personnel already approved but not hired.







THE HAMILTON PUBLIC LIBRARY

HAMILTON PUBLIC LIBRARY



3 2022 21292594 1